YAMAHA

OWNER'S MANUAL

⚠ Read this manual carefully before operating this vehicle.

TRICITY

MOTORCYCLE

MWS125-C (Tricity 125)

BCS-F8199-E2

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EAU81566

⚠ Read this manual carefully before operating this vehicle. This manual should stay with this vehicle if it is sold.

EAU81593

For Europe

Declaration of Conformity:

Hereby, MITSUBISHI ELECTRIC CORPORATION, HIMEJI WORKS, declares that the radio equipment type, Smart Keyless System (SKEA7E-01 (Smart Unit), SKEA7E-02 (Hand Unit)) is in compliance with Directive 2014/53/EU.
The full text of the EU declaration of conformity is available at the following internet address:
http://www.mitsubishielectric.com/bu/automotive/doc/re.html

Smart Unit: SKEA7E-01
Operation frequency: 125 kHz
Maximum output power: 107 dBuV/m at 10 meters

Hand Unit: SKEA7E-02
Operation frequency: 433.92 MHz
Maximum output power: 10 mW

Manufacturer:
MITSUBISHI ELECTRIC CORPORATION, HIMEJI WORKS
840, Chiyoda-machi, Himeji, Hyogo 670-8677, Japan

Importer:
YAMAHA MOTOR EUROPE N.V.
Koolhovenlaan 101, 1119 NC Schiphol-Rijk, 1117 ZN, Schiphol, the Netherlands

EAU94453

For UK

UK CA Declaration of Conformity:

Hereby, MITSUBISHI ELECTRIC CORPORATION, HIMEJI WORKS, declares that the radio equipment type, Smart Keyless System (SKEA7E-01 (Smart Unit), SKEA7E-02 (Hand Unit)) is in compliance with the Radio Equipment Regulations 2017.
The full text of the declaration of conformity is available at the following internet address:
http://www.mitsubishielectric.com/bu/automotive/doc/ukgb.html

Smart Unit: SKEA7E-01
Operation frequency: 125 kHz
Maximum output power: 107 dBuV/m at 10 meters

Hand Unit: SKEA7E-02
Operation frequency: 433.92 MHz
Maximum output power: 10 mW

Manufacturer:
MITSUBISHI ELECTRIC CORPORATION, HIMEJI WORKS
840, Chiyoda-machi, Himeji, Hyogo 670-8677, Japan

Importer:
YAMAHA MOTOR EUROPE N.V., BRANCH UK
Units A2-A3, Kingswey Business Park, Forsyth Road, Woking, Surrey. GU21 5SA. United Kingdom.

EAUN3031

For Europe

Declaration of Conformity:

Hereby, YAMAHA MOTOR CO., LTD declares that the radio equipment type, Communication Control Unit, Y08U-A00 is in compliance with Directive 2014/53/EU.
The full text of the EU declaration of conformity is available at the following internet address:
https://global.yamaha-motor.com/eu_doc/

Frequency band: 2402~2480 MHz
The maximum radio frequency power:
Bluetooth 4.2 2.75 dBm 1.88 mW
Bluetooth 5.0 2.59 dBm 1.82 mW

Manufacturer:
PT Chao Long Motor Parts Indonesia
JL.MERANTI 1 BLOK, L2 NO. 5-6 DELTA SILICON INDUSTRIAL
PARK LIPPO CIKARANG BEKASI 17550, INDONESIA

Importer:
YAMAHA MOTOR EUROPE N.V.
Koolhovenlaan 101, 1119 NC Schiphol-Rijk, 1117 ZN, Schiphol, the Netherlands

EAU94431

For UK

UK CA Declaration of Conformity:

Hereby, YAMAHA MOTOR CO., LTD declares that the radio equipment type, Communication Control Unit, Y08U-A00 is in compliance with the Radio Equipment Regulations 2017.
The full text of the declaration of conformity is available at the following internet address:
https://global.yamaha-motor.com/eu_doc/

Frequency band: 2.4 GHz
The maximum radio frequency power: 50.12 mW

Manufacturer:
YAMAHA MOTOR CO., LTD
2500 Shingai, Iwata, Shizuoka, 438-8501 Japan

Importer:
YAMAHA MOTOR EUROPE N.V., BRANCH UK
Units A2-A3, Kingswey Business Park, Forsyth Road, Woking, Surrey. GU21 5SA. United Kingdom.

EAU60580

Welcome to the Yamaha world of motorcycling!
As the owner of the MWS125-C, you are benefiting from Yamaha's vast experience and newest technology regarding the design and manufacture of high-quality products, which have earned Yamaha a reputation for dependability.
Please take the time to read this manual thoroughly, so as to enjoy all advantages of your MWS125-C. The Owner's Manual does not only instruct you in how to operate, inspect and maintain your vehicle, but also in how to safeguard yourself and others from trouble and injury.
In addition, the many tips given in this manual will help keep your vehicle in the best possible condition. If you have any further questions, do not hesitate to contact your Yamaha dealer.
The Yamaha team wishes you many safe and pleasant rides. So, remember to put safety first!
Yamaha continually seeks advancements in product design and quality. Therefore, while this manual contains the most current product information available at the time of printing, there may be minor discrepancies between your vehicle and this manual. If there is any question concerning this manual, please consult a Yamaha dealer.

EWA17780

⚠ WARNING

Please read this manual carefully and completely before operating this vehicle.

Important manual information

EAU10134

Particularly important information is distinguished in this manual by the following notations:

⚠	**This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.**
⚠ WARNING	**A WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.**
NOTICE	**A NOTICE indicates special precautions that must be taken to avoid damage to the vehicle or other property.**
TIP	A TIP provides key information to make procedures easier or clearer.

*Product and specifications are subject to change without notice.

EAU37432

MWS125-C
OWNER'S MANUAL
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EAU60750

Be a Responsible Owner

As the vehicle's owner, you are responsible for the safe and proper operation of your vehicle.

This is a leaning multi-wheel vehicle.

The safe use and operation of this vehicle is dependent upon the use of proper riding techniques as well as the expertise of the operator. Every operator should know the following requirements before riding this vehicle.

He or she should:

- Obtain thorough instructions from a competent source on all aspects of this vehicle's operation.
- Observe the warnings and maintenance requirements in this Owner's Manual.
- Obtain qualified training in safe and proper riding techniques.
- Obtain professional technical service as indicated in this Owner's Manual and/or when made necessary by mechanical conditions.
- Never operate a vehicle without proper training or instruction. Take a training course. Beginners should receive training from a certified instructor. Contact a Yamaha dealer to find out about the training courses nearest you.

Safe Riding

Perform the pre-operation checks each time you use the vehicle to make sure it is in safe operating condition. Failure to inspect or maintain the vehicle properly increases the possibility of an accident or equipment damage. See page 7-1 for a list of pre-operation checks.

- This vehicle is designed to carry the operator and a passenger.
- The failure of motorists to detect and recognize scooters and motorcycles in traffic is the predominating cause of automobile and such smaller vehicle accidents. Many accidents have been caused by an automobile driver who did not see the smaller vehicle. Making yourself conspicuous appears to be very effective in reducing the chance of this type of accident.

  Therefore:
  - Wear a brightly colored jacket.
  - Use extra caution when you are approaching and passing through intersections, since intersections are the most likely places for such smaller vehicle accidents to occur.
  - Ride where other motorists can see you. Avoid riding in another motorist's blind spot.
  - Never maintain a vehicle without proper knowledge. Contact a Yamaha dealer to inform you on basic vehicle maintenance. Certain maintenance can only be carried out by certified staff.
- Many accidents involve inexperienced operators. In fact, many operators who have been involved in accidents do not even have a current driver's license.
  - Make sure that you are qualified and that you only lend your vehicle to other qualified operators.

- Know your skills and limits. Staying within your limits may help you to avoid an accident.
- We recommend that you practice riding your vehicle where there is no traffic until you have become thoroughly familiar with the vehicle and all of its controls.

- Many accidents have been caused by error of the vehicle operator. A typical error made by the operator is veering wide on a turn due to excessive speed or undercornering (insufficient lean angle for the speed).
  - Always obey the speed limit and never travel faster than warranted by road and traffic conditions.
  - Always signal before turning or changing lanes. Make sure that other motorists can see you.
- The posture of the operator and passenger is important for proper control.
  - The operator should keep both hands on the handlebar and both feet on the operator footrests during operation to maintain control of the vehicle.
  - The passenger should always hold onto the operator, the seat strap or grab bar, if equipped, with both hands and keep both feet on the passenger footrests. Never carry a passenger unless he or she can firmly place both feet on the passenger footrests.
- Never ride under the influence of alcohol or other drugs.
- This vehicle is designed for on-road use only. It is not suitable for off-road use.

Protective Apparel

The majority of fatalities from scooter and motorcycle accidents are the result of head injuries. The use of a safety helmet is the single most critical factor in the prevention or reduction of head injuries.

- Always wear an approved helmet.
- Wear a face shield or goggles. Wind in your unprotected eyes could contribute to an impairment of vision that could delay seeing a hazard.
- The use of a jacket, substantial shoes, trousers, gloves, etc., is effective in preventing or reducing abrasions or lacerations.
- Never wear loose-fitting clothes, otherwise they could catch on the control levers or wheels and cause injury or an accident.
- Always wear protective clothing that covers your legs, ankles, and feet. The engine or exhaust system become very hot during or after operation and can cause burns.
- A passenger should also observe the above precautions.

Avoid Carbon Monoxide Poisoning

All engine exhaust contains carbon monoxide, a deadly gas. Breathing carbon monoxide can cause headaches, dizziness, drowsiness, nausea, confusion, and eventually death.

Carbon Monoxide is a colorless, odorless, tasteless gas which may be present even if you do not see or smell any engine exhaust. Deadly levels of carbon monoxide can collect rapidly and you can quickly be overcome and unable to save yourself. Also, deadly levels of carbon monoxide can linger for hours or days in enclosed or poorly ventilated areas. If you experience any symptoms of carbon monoxide poisoning, leave the area immediately, get fresh air, and SEEK MEDICAL TREATMENT.

- Do not run engine indoors. Even if you try to ventilate engine exhaust with fans or open windows and doors, carbon monoxide can rapidly reach dangerous levels.
- Do not run engine in poorly ventilated or partially enclosed areas such as barns, garages, or carports.
- Do not run engine outdoors where engine exhaust can be drawn into a building through openings such as windows and doors.

Loading

Adding accessories or cargo to your vehicle can adversely affect stability and handling if the weight distribution of the vehicle is changed. To avoid the possibility of an accident, use extreme caution when adding cargo or accessories to your vehicle. Use extra care when riding a vehicle that has added cargo or accessories. Here, along with the information about accessories below, are some general guidelines to follow if loading cargo to your vehicle:

The total weight of the operator, passenger, accessories and cargo must not exceed the maximum load limit. **Operation of an overloaded vehicle could cause an accident.**

Maximum load:
167 kg (368 lb)

When loading within this weight limit, keep the following in mind:

- Cargo and accessory weight should be kept as low and close to the vehicle as possible. Securely pack your heaviest items as close to the center of the vehicle as possible and make sure to distribute the weight as evenly as possible on both sides of the vehicle to minimize imbalance or instability.
- Shifting weights can create a sudden imbalance. Make sure that accessories and cargo are securely attached to the vehicle before riding. Check accessory mounts and cargo restraints frequently.
  - Properly adjust the suspension for your load (suspension-adjustable models only), and check the condition and pressure of your tires.
  - Never attach any large or heavy items to the handlebar, front fork, or front fender. Such items can create unstable handling or a slow steering response.
- **This vehicle is not designed to pull a trailer or to be attached to a sidecar.**

Genuine Yamaha Accessories

Choosing accessories for your vehicle is an important decision. Genuine Yamaha accessories, which are avail-

able only from a Yamaha dealer, have been designed, tested, and approved by Yamaha for use on your vehicle.
Many companies with no connection to Yamaha manufacture parts and accessories or offer other modifications for Yamaha vehicles. Yamaha is not in a position to test the products that these aftermarket companies produce. Therefore, Yamaha can neither endorse nor recommend the use of accessories not sold by Yamaha or modifications not specifically recommended by Yamaha, even if sold and installed by a Yamaha dealer.

Aftermarket Parts, Accessories, and Modifications

While you may find aftermarket products similar in design and quality to genuine Yamaha accessories, recognize that some aftermarket accessories or modifications are not suitable because of potential safety hazards to you or others. Installing aftermarket products or having other modifications performed to your vehicle that change any of the vehicle's design or operation characteristics can put you and others at greater risk of serious injury or death. You are responsible for injuries related to changes in the vehicle.
Keep the following guidelines in mind, as well as those provided under "Loading" when mounting accessories.

- Never install accessories or carry cargo that would impair the performance of your vehicle. Carefully inspect the accessory before using it to make sure that it does not in any way reduce ground clearance or cornering clearance, limit suspension travel, steering travel or control operation, or obscure lights or reflectors.
  - Accessories fitted to the handlebar or the front fork area can create instability due to improper weight distribution or aerodynamic changes. If accessories are added to the handlebar or front fork area, they must be as lightweight as possible and should be kept to a minimum.
  - Bulky or large accessories may seriously affect the stability of the vehicle due to aerodynamic effects. Wind may attempt to lift the vehicle, or the vehicle may become unstable in cross winds. These accessories may also cause instability when passing or being passed by large vehicles.
  - Certain accessories can displace the operator from his or her normal riding position. This improper position limits the freedom of movement of the operator and may limit control ability, therefore, such accessories are not recommended.
- Use caution when adding electrical accessories. If electrical accessories exceed the capacity of the vehicle's electrical system, an electric failure could result, which could cause a dangerous loss of lights or engine power.

Aftermarket Tires and Rims

The tires and rims that came with your vehicle were designed to match the performance capabilities and to provide the best combination of handling, braking, and comfort. Other tires, rims, sizes, and combinations may not be

appropriate. Refer to page 9-16 for tire specifications and more information on replacing your tires.

Transporting the Vehicle

Be sure to observe the following instructions before transporting the vehicle in another vehicle.

- Remove all loose items from the vehicle.
- Point the front wheels straight ahead on the trailer or in the truck bed, and choke it in a rail to prevent movement.
- Secure the vehicle with tie-downs or suitable straps that are attached to solid parts of the vehicle, such as the frame or upper front fork triple clamp (and not, for example, to rubber-mounted handlebars or turn signals, or parts that could break). Choose the location for the straps carefully so the straps will not rub against painted surfaces during transport.
- The suspension should be compressed somewhat by the tie-downs, if possible, so that the vehicle will not bounce excessively during transport.

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Further safe-riding points

- Be sure to signal clearly when making turns.
- Braking can be extremely difficult on a wet road. Avoid hard braking, because the vehicle could slide. Apply the brakes slowly when stopping on a wet surface.
- Slow down as you approach a corner or turn. Once you have completed a turn, accelerate slowly.
- Be careful when passing parked cars. A driver might not see you and open a door in your path.
- Railroad crossings, streetcar rails, iron plates on road construction sites, and manhole covers become extremely slippery when wet. Slow down and cross them with caution. Keep the vehicle upright, otherwise it could slide out from under you.
- The brake pads or linings could get wet when you wash the vehicle. After washing the vehicle, check the brakes before riding.

- Always wear a helmet, gloves, trousers (tapered around the cuff and ankle so they do not flap), and a brightly colored jacket.
- Do not carry too much luggage on the vehicle. An overloaded vehicle is unstable. Use a strong cord to secure any luggage to the carrier (if equipped). A loose load will affect the stability of the vehicle and could divert your attention from the road. (See page 1-3.)

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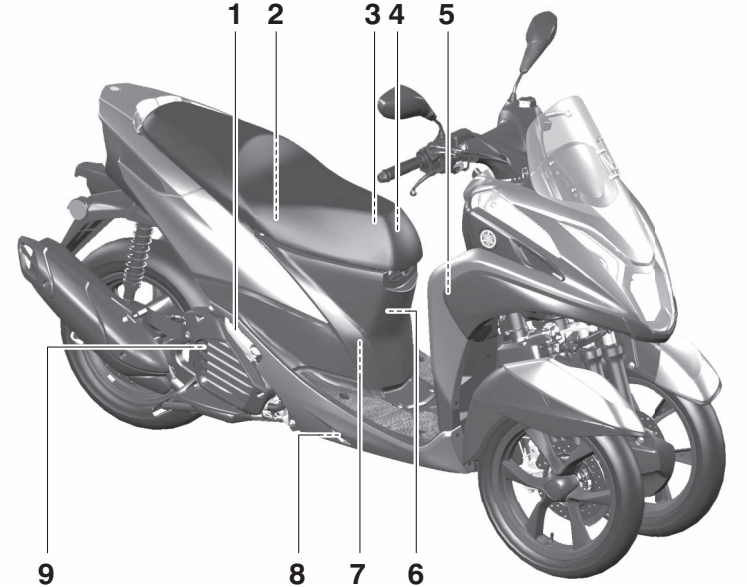
Left view



1. Luggage hook (page 6-16)
2. Passenger footrest (page 6-13)
3. Storage compartment (page 6-14)
4. Air filter element (page 9-13)
5. Final transmission oil filler cap (page 9-11)
6. Final transmission oil drain bolt (page 9-11)
7. V-belt case air filter element (page 9-13)
8. Engine oil drain bolt A (page 9-10)
9. Engine oil drain bolt B (page 9-10)

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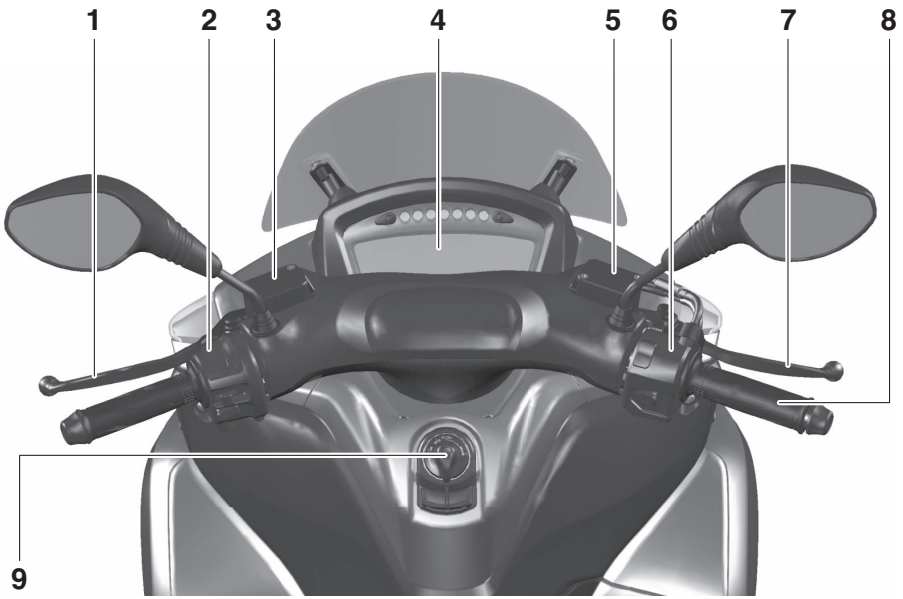
Right view



1. Passenger footrest (page 6-13)
2. Fuel tank cap (page 6-10)
3. Tool kit (page 9-2)
4. Fuse box (page 9-27)
5. Accessory box (page 6-15)
6. Battery (page 9-25)
7. Spark plug (page 9-8)
8. Coolant reservoir (page 9-12)
9. Engine oil filler cap (page 9-10)

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Controls and instruments

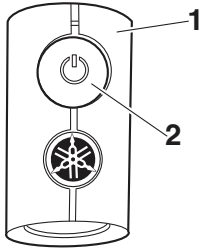


1. Rear brake lever (page 6-9)
2. Left handlebar switches (page 6-8)
3. Rear brake fluid reservoir (page 9-19)
4. Multi-function meter unit (page 6-2)
5. Front brake fluid reservoir (page 9-19)
6. Right handlebar switches (page 6-8)
7. Front brake lever (page 6-9)
8. Throttle grip (page 9-15)
9. Main switch/steering lock

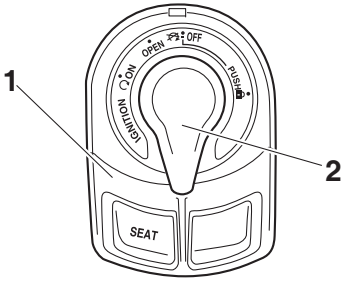
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Smart key system

The smart key system enables you to operate the vehicle without using a mechanical key. In addition, there is an answer-back function to help you locate the vehicle in a parking lot. (See page 3-5.)



1. Smart key
2. Smart key button

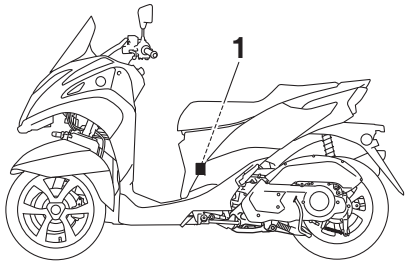


1. Main switch
2. Main switch knob

EWA14704

⚠ WARNING

- **Keep implanted pacemakers or cardiac defibrillators, as well as other electric medical devices away from the vehicle mounted antenna (see illustration).**
- **Radio waves transmitted by the antenna may affect the operation of such devices when close by.**
- **If you have an electric medical device, consult a doctor or the device manufacturer before using this vehicle.**



1. Vehicle mounted antenna

ECA24080

NOTICE

The smart key system uses weak radio waves. The smart key system may not work in the following situations.

- **The smart key is placed in a location exposed to strong radio waves or other electromagnetic noise**
- **There are facilities nearby that are emitting strong radio waves (TV or radio towers, power plants, broadcasting stations, airports, etc.)**

- **You are carrying or using communication equipment such as radios or mobile phones in close proximity of the smart key**
- **The smart key is in contact with or covered by a metallic object**
- **Other vehicles equipped with a smart key system are nearby**

In such situations, move the smart key to another location and perform the operation again. If it still does not work, operate the vehicle in emergency mode. (See page 9-32.)

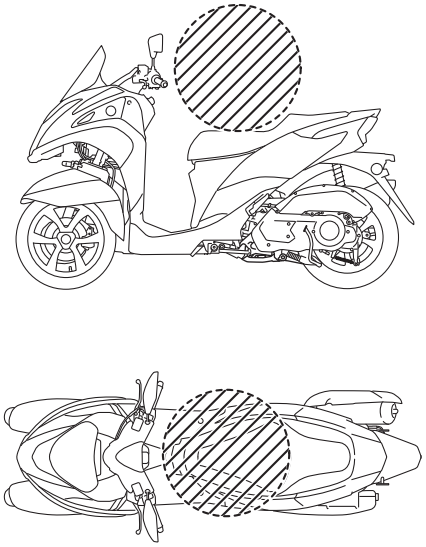
TIP

To preserve vehicle battery power, the smart key system turns off approximately 9 days after the vehicle was last used (the answer-back function is disabled). In this situation, simply push the main switch knob to turn the smart key system back on.

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Operating range of the smart key system

The approximate operating range of the smart key system is shown below.



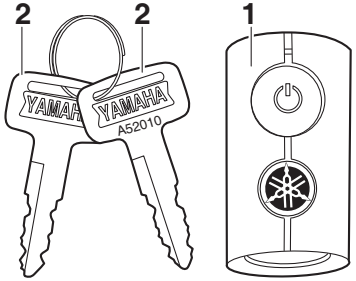
If the smart key is turned off, the vehicle will not recognize the smart key even if it is within operating range. If the smart key battery is discharged, the smart key system may not work or its operating range may become very short.

TIP

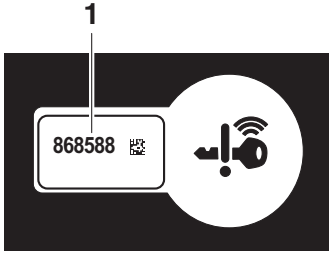
- Do not place the smart key in a storage compartment.
- Always carry the smart key with you.
- Turn the smart key off when leaving the vehicle.

EAUN2460

Handling of the smart key and mechanical keys



1. Smart key
2. Mechanical key



1. Identification number card

EWA17952

⚠ WARNING

- **The smart key should be carried with you. Do not store it on the vehicle.**
- **When the smart key is within operating range, exercise due care because other people not carrying the smart key can start the engine and operate the vehicle.**

Included with the vehicle is one smart key, two mechanical keys, and one identification number card. Keep one mechanical key and the identification number card in a safe place separate from the vehicle.

If the vehicle battery is discharged, the mechanical key can be used to open the seat to charge or replace the battery. Therefore it is recommended that you carry one mechanical key together with the smart key.

If the smart key and the smart key system identification number are both lost or damaged, the entire smart key system will need to be replaced. To prevent this, it is recommended that you **write down the identification number in case the identification number card is lost.**

ECA21573

NOTICE

The smart key has precision electronic components. Observe the following precautions to prevent possible malfunction or damage.

- **Do not place or store the smart key in a storage compartment. The smart key may be damaged from road vibrations or excessive heat.**
- **Do not drop, bend, or subject the smart key to strong impacts.**
- **Do not submerge the smart key in water or other liquids.**
- **Do not place heavy items or excessive stress on the smart key.**
- **Do not leave the smart key in a place exposed to direct sunlight, high temperature or high humidity.**
- **Do not grind or attempt to modify the smart key.**

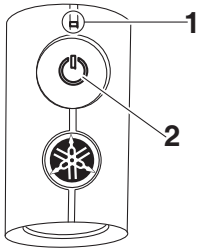
- **Keep the smart key away from strong magnetic fields and magnetic objects such as key holders, TVs, and computers.**
- **Keep the smart key away from electric medical equipment.**
- **Do not allow oils, polishing agents, fuel, or any strong chemicals to come in contact with the smart key. The smart key body may become discolored or cracked.**

TIP

- The smart key battery life is approximately two years, but this may vary according to operating conditions.
- Replace the smart key battery when the smart key system indicator light flashes for 20 seconds when the vehicle is turned on, or when the smart key indicator light does not come on when the smart key button is pushed. (See page 3-6.) After changing the smart key battery, if the smart key system still does not operate, check the vehicle battery and then have a Yamaha dealer check the vehicle.
- If the smart key continually receives radio waves, the smart key battery will discharge quickly. (For example, when placed in the vicinity of electrical products such as televisions, radios, or computers.)
- You can register up to six smart keys for the same vehicle. See a Yamaha dealer regarding spare smart keys.
- If a smart key is lost, contact a Yamaha dealer immediately to prevent the vehicle from being stolen, etc.

EAU76474

Smart key



1. Smart key indicator light
2. Smart key button

EWA17952

⚠ WARNING

- **The smart key should be carried with you. Do not store it on the vehicle.**
- **When the smart key is within operating range, exercise due care because other people not carrying the smart key can start the engine and operate the vehicle.**

To turn the smart key on or off

Push the smart key button for approximately 1 second to turn the smart key on or off. When the smart key is turned off, the vehicle cannot be operated even if the smart key is within operating range. To operate the vehicle, turn the smart key on and bring it within operating range.

To check whether the smart key is turned on or off

Push the smart key button to confirm the current operating status of the smart key.

If the smart key indicator light:

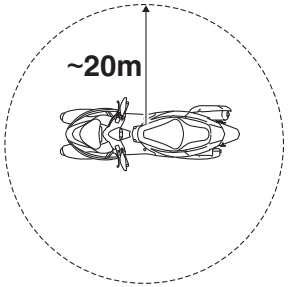
- Comes on quickly for 0.1 seconds: The smart key is turned on.
- Comes on slowly for 0.5 seconds: The smart key is turned off.

Remote answer-back function

Push the smart key button to operate the answer-back function remotely. The beeper will sound twice and all of the turn signal lights will flash twice. This feature is convenient for locating your vehicle in a parking lot and other areas.

Operating range of the answer-back function

The approximate operating range of the answer-back function is as shown.



As the smart key system uses weak radio waves, the operating range may be affected by the surrounding environment.

To turn the answer-back beeper on or off

The beeper, which sounds when the answer-back function is operated, can be turned on or off according to the following procedure.

1. Turn the smart key on and bring it within operating range.
2. Turn the main switch to “OFF”, and then push the main switch knob once.
3. Within 9 seconds of pushing the knob, push and hold the knob again for 5 seconds.
4. When the beeper sounds, the setting is complete.
   If the beeper:
   - Sounds twice: The beeper is turned off.
   - Sounds once: The beeper is turned on.

EAUA0690

Replacing the smart key battery

Replace the battery in the following situations.

- The smart key system indicator light flashes for about 20 seconds when the power of the vehicle is turned on.
- The answer-back function does not operate when the smart key button is pushed.



1. Smart key system indicator light " "

EWA20632

WARNING

Danger of explosion if battery is incorrectly replaced

- **Replace only with the same or equivalent type.**
- **Please check and obey all local laws and regulations for the disposal of batteries or accumulations.**
- **Never dispose of battery in fire or mechanical crushing or cutting.**
- **If battery is incorrectly discarded or heated to high temperature (100 °C (212 °F) or higher), gas may be generated inside battery, causing electrolyte leak, internal short circuit, heat generation, explosion and violent flaring.**

Do not expose Hand Unit to excessive heat such as sunshine, fire or the like.

Do not ingest the battery, Chemical Burn Hazard

- **This product contains a coin/button cell battery. If the coin/button cell battery is swallowed or placed inside any part of the body, it can cause severe internal burns in just 2 hours and can lead to death. Keep new and used batteries away from children.**
- **If the battery compartment does not close securely, stop using the product and keep it away from children.**
- **If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical action.**

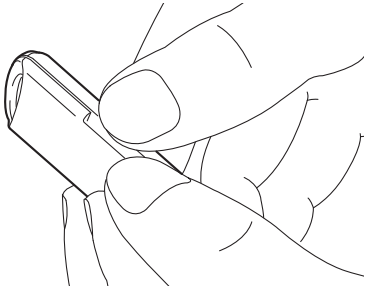
ECA28480

NOTICE

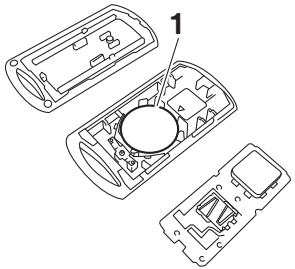
- **Take precautions to prevent the waterproof seal from being damaged or contaminated by dirt.**
- **Do not touch the internal circuits and terminals. This may cause malfunctions.**
- **Do not apply excessive force to the smart key when replacing the battery.**
- **Make sure the battery is installed correctly. Confirm the direction of the positive "+" side of the battery.**

To replace the smart key battery

1. Gently pry open the smart key case as shown. Otherwise, have a Yamaha dealer replace the battery.



2. Remove the battery.



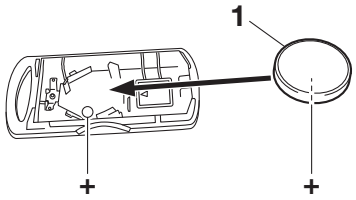
1. Battery

TIP

Dispose of the removed battery in accordance with local regulations.

3. Note the polarity of the battery and install it with the positive "+" side facing downwards as shown.

Specified battery:
CR2032

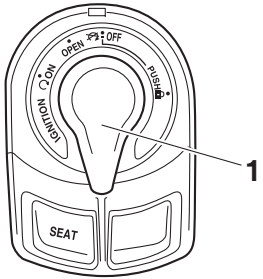


1. Battery

4. Gently snap the smart key case closed.

EAUN2101

Main switch



1. Main switch knob



1. Smart key system indicator light ""

The main switch is used to turn the vehicle power ON/OFF, lock/unlock the steering, and open the seat. After pushing the main switch knob (and confirmation with the smart key has

taken place), the main switch can be turned while the smart key system indicator light is on (approximately 4 seconds).

EWA18720

3

⚠ WARNING

Never turn the main switch to "OFF", "🔒", or "OPEN" while the vehicle is moving. Otherwise the electrical systems will be switched off, which may result in loss of control or an accident.

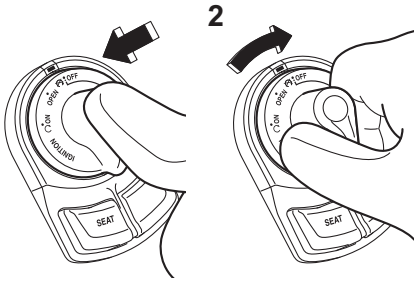
TIP

Do not push the main switch knob repeatedly or turn the main switch back and forth excessively (beyond normal use). To protect the main switch from damage, the smart key system will temporarily disable, and the smart key system indicator light will flash. If this occurs, wait until the indicator light stops flashing, and then operate the main switch.

The main switch positions are described below.

EAU76502

ON



1. Push.
2. Turn.

All electrical circuits are supplied with power, and the engine can be started.

To turn the vehicle power on

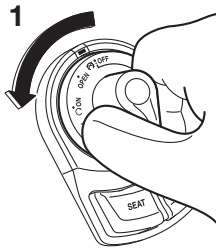
1. Turn the smart key on and bring it within operating range.
2. Push the main switch knob and the smart key indicator light will come on for approximately 4 seconds.
3. While the smart key system indicator light is on, turn the main switch to "ON". All of the turn signal lights will flash twice and the vehicle power will turn on.

TIP

- If the vehicle battery voltage is low, the turn signal lights will not flash.
- See "Emergency mode" on page 9-32 for information on turning the vehicle power on without the smart key.

EAU76511

OFF



1. Turn.

All electrical systems are off.

To turn the vehicle power off

1. With the smart key turned on and within operating range, turn the main switch to "OFF".

2. The turn signal lights flash once and the vehicle power turns off.

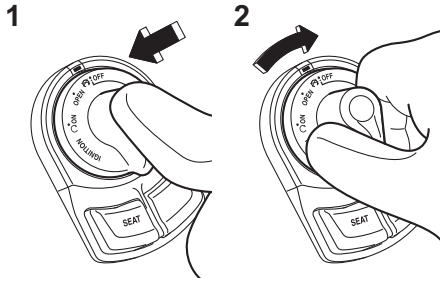
TIP

When the main switch is turned to "OFF" but the smart key cannot be confirmed (the smart key is either outside operation range or has been turned off), the beeper will sound for 3 seconds and the smart key system indicator light will flash for 30 seconds.

- During this 30 seconds, the main switch can be freely operated.
- After 30 seconds, the vehicle power will turn off automatically.
- To turn the vehicle power off immediately, push the main switch knob four times within 2 seconds.

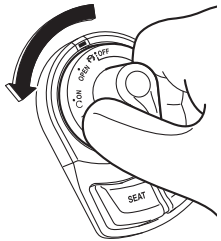
EAU79110

OPEN (open)



1. Push.
2. Turn.

The seat can be opened.
To open the seat, push the "SEAT" button, and then lift the rear of the seat.



TIP

Make sure that the seat is securely closed before starting off.

Open position reminder

To prevent you from accidentally leaving the vehicle unlocked by walking away with the main switch still in the "OPEN" position, the smart key system beeper will sound under the following conditions.

- When the main switch has been in the open position for 3 minutes
- If the smart key is turned off while the main switch is in the open position
- If you walk out of range of the smart key system with the main switch in the open position

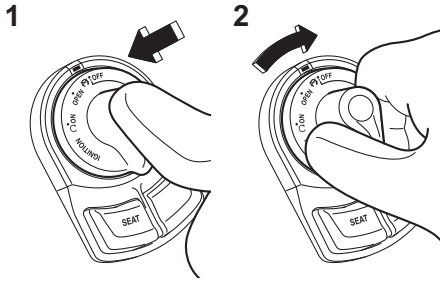
If the beeper sounds after 3 minutes, turn the main switch to "OFF" or "".
If the beeper sounds because the smart key was turned off or moved out of range, turn the smart key on and walk back into range.

TIP

- The beeper will turn off after 1 minute.
- The seat can also be opened with the mechanical key. (See page 6-14.)

EAU76521

"🔒" (lock)



1. Push.
2. Turn.

The steering is locked and all electrical systems are off.

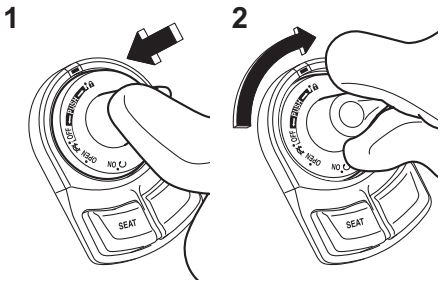
To lock the steering

1. Turn the handlebar all the way to the left.
2. With the smart key turned on and within operating range, push the main switch knob.
3. While the smart key system indicator light is on, push and turn the main switch to "🔒".

TIP

If the steering will not lock, try turning the handlebar back to the right slightly.

To unlock the steering



1. Push.
2. Turn.

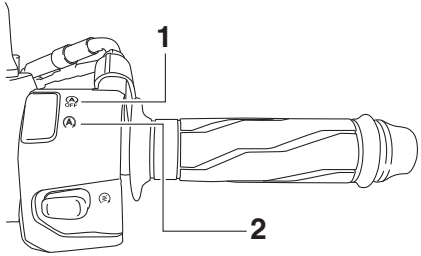
1. With the smart key turned on and within operating range, push the main switch knob.
2. While the smart key system indicator light is on, push and turn the main switch to the desired position.

Stop and Start System

EAU76826



1. Stop and System indicator light "Ⓐ"



1. OFF "Ⓐ"
2. ON "Ⓐ"

The Stop and Start System stops the engine automatically when the vehicle is stopped in order to prevent noise, control exhaust emissions, and reduce fuel consumption.

When the rider turns the throttle grip slightly, the engine restarts automatically and the vehicle starts off.

ECA23961

NOTICE

When parking the vehicle or leaving the vehicle unattended, be sure to turn the main switch off. If the Stop and Start System is left turned on, the battery could become discharged and it may not be possible to restart the engine due to insufficient battery voltage.

TIP

- Although the engine normally stops at the same time as the vehicle, there may be a delay when operating the vehicle under 10 km/h, such as in heavy traffic.
- If you think the battery voltage is low because the engine cannot be started using the starter switch or for some other reason, do not turn on the Stop and Start System.
- Have a Yamaha dealer check the battery at the intervals specified in the periodic maintenance chart.

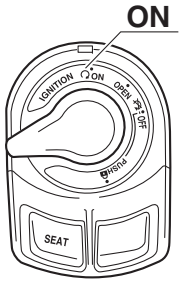
Stop and Start System operation

EAU76671

Activating the Stop and Start System

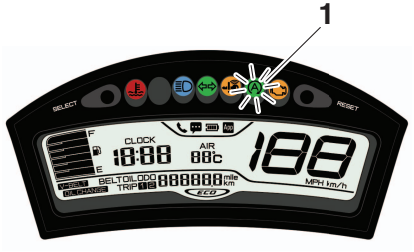
EAU76687

1. Turn the main switch on.



2. Set the Stop and Start System switch to "Ⓐ".
3. The Stop and Start System activates and the indicator light comes on when the following conditions are met:
   - The Stop and Start System switch is set to "Ⓐ".
   - After the engine was warmed up, the engine was left idling for a certain period.

- The vehicle has traveled at a speed of 10 km/h or higher.



1. On

4. To turn off the Stop and Start System, set the Stop and Start System switch to "Ⓐ OFF".

TIP

- To preserve battery power, the Stop and Start System may not activate.
- If the Stop and Start System does not activate, have a Yamaha dealer check the battery.

EAU76832

Stop the engine

The engine will stop automatically when the following conditions are met:

- The Stop and Start System switch is set to "Ⓐ".
- The "Ⓐ" indicator light on the multi-function meter is on.
- The vehicle is stopped with the throttle grip fully returned.

At this time, the "Ⓐ" indicator light starts flashing to indicate that the engine is currently stopped by the Stop and Start System.

EAU76704

Restart the engine

If the throttle grip is turned while the Stop and Start System indicator light is flashing, the engine will automatically restart and the "Ⓐ" indicator light will stop flashing.

EWA18731

⚠ WARNING

Do not turn the throttle grip too much or too quickly when the Stop and Start System is activated and the engine is stopped. Otherwise, the vehicle could start moving unexpectedly after the engine restarts.

TIP

- When the sidestand is lowered, the Stop and Start System is deactivated.
- If the Stop and Start System does not operate correctly, have a Yamaha dealer check the vehicle.

EAU76711

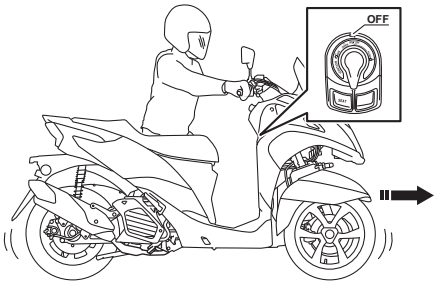
Precautions when using the Stop and Start System

In order to prevent accidents due to improper operation, carefully read and observe the following precautions.

EWA18741

⚠ WARNING

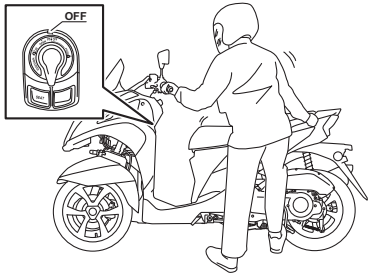
When walking while pushing the vehicle, be sure to turn the main switch off. If the vehicle is pushed while the Stop and Start System is left turned on, the engine could start and the vehicle could start moving if the throttle grip is turned accidentally.



EWA18751

⚠ WARNING

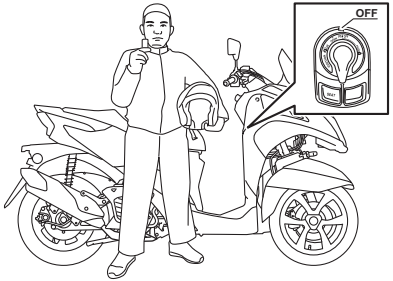
When placing the vehicle on the centerstand, be sure to turn the main switch off. If the vehicle is placed on the centerstand while the Stop and Start System is left turned on, the engine could start and the vehicle could start moving if the throttle grip is turned accidentally.



EWA18771

⚠ WARNING

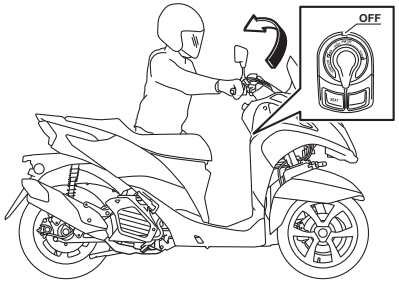
- **When leaving the vehicle unattended, be sure to turn the main switch off.**
- **Do not leave the Stop and Start System turned on when parking the vehicle. Otherwise, the engine could start and the vehicle could start moving if the throttle grip is turned accidentally.**



EWA18781

⚠ WARNING

Before performing maintenance, be sure to turn the main switch off. If maintenance is performed while the Stop and Start System is turned on, the engine could start and the vehicle could start moving if the throttle grip is turned.



4

EAUU2511

CCU-Communication Control Unit (if equipped)

The CCU allows your vehicle and smartphone to connect using Bluetooth wireless technology and the MyRide App.
With this connection, notifications from apps, incoming phone calls and missed calls are signaled to you, and the battery level of your smartphone is displayed.

EWAN0070

⚠ WARNING

- **Always stop the vehicle before operating your smartphone.**
- **Never take your hands off the handlebars while riding.**
- **Always concentrate on riding by keeping your eyes and mind on the road.**

ECAN0150

NOTICE

The Bluetooth connection may not work in the following situations.

- **In a location exposed to strong radio waves or other electromagnetic noise.**
- **At facilities nearby that are emitting strong radio waves (TV or radio towers, power plants, broadcasting stations, airports, etc.).**

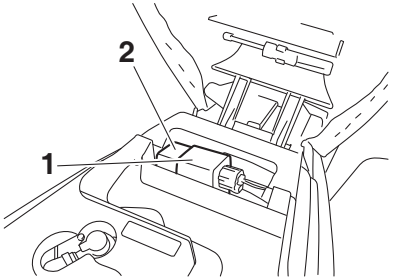
Pairing the CCU and your smartphone

1. Install the MyRide App on your smartphone and activate it.

TIP

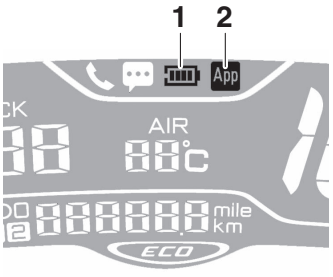
The MyRide App can be downloaded from an App store.

2. Open the seat. (See page 6-13.)
3. Pull out the CCU and scan its QR code with the MyRide App.



1. CCU (Communication Control Unit)
2. CCU QR Code

4. When pairing is complete, the App connect icon and smartphone battery level meter will come on.



1. Smartphone battery level meter
2. App connect icon

TIP

- Once paired, the smartphone is registered in the CCU. The next time the vehicle is turned on and the MyRide App is active, the connection will be automatically executed.
- Only one smartphone can be connected to the CCU at a time.
- If more than one phone has been registered in the CCU, then the first phone within reach will be connected.

EAU4939Y

Indicator lights and warning lights



1. Coolant temperature warning light “ ”
2. High beam indicator light “ ”
3. Turn signal indicator light “ ”
4. Smart key system indicator light “ ”
5. Stop and Start System indicator light “ ”
6. Malfunction indicator light “ ”

EAUM4390

Turn signal indicator light “ ”

This indicator light flashes when a turn signal light is flashing.

EAU88310

High beam indicator light “ ”

This indicator light comes on when the high beam of the headlight is switched on.

EAU85120

Coolant temperature warning light “ ”

This warning light comes on if the engine overheats. If this occurs, stop the engine immediately and allow the engine to cool. See page 9-31 for further instructions.

ECA10022

NOTICE

Do not continue to operate the engine if it is overheating.

TIP

When the vehicle is turned on, this light should come on for a few seconds and then go off. Otherwise, have a Yamaha dealer check the vehicle.

EAU91840

Malfunction indicator light (MIL) “ ”

This light comes on or flashes if a problem is detected in the engine or other vehicle control system. If this occurs, have a Yamaha dealer check the onboard diagnostic system. The electrical circuit of the warning light can be checked by turning the vehicle power on. The light should come on for a few seconds, and then go off. If the light does not come on initially when the vehicle power is turned on, or if the light remains on, have a Yamaha dealer check the vehicle.

ECA26820

NOTICE

If the MIL starts flashing, reduce engine speed to prevent exhaust system damage.

TIP

The engine is sensitively monitored by the on-board diagnostic system to detect deterioration or malfunction of the emission control system. Therefore the MIL may come on or flash due to vehicle modifications, lack of maintenance, or excessive/improper use of the motorcycle. To prevent this, observe these precautions.

- Do not attempt to modify the software of the engine control unit.
- Do not add any electrical accessories that interfere with engine control.

- Do not use aftermarket accessories or parts such as suspension, spark plugs, injectors, exhaust system, etc.
- Do not change the drivetrain specifications (chain, sprockets, wheels, tires, etc.).
- Do not remove or alter the O2 sensor, air induction system, or exhaust parts (catalysts or EXUP, etc.).
- Maintain the drive chain properly.
- Maintain correct tire pressure.
- Maintain proper brake pedal height to prevent rear brake from dragging.
- Do not operate the vehicle in an extreme manner. For example, repeated or excessive opening and closing of the throttle, racing, burnouts, wheelies, extended half-clutch use, etc.

EAUN2772

Smart key system indicator light “ ”

This indicator light communicates the status of the smart key system. When the smart key system is operating normally, this indicator light will be off. If there is an error in the smart key system, the indicator light will flash. The indicator light will also flash when communication between the vehicle and smart key takes place and when certain smart key system operations are carried out.

EAUN2830

Stop and Start System indicator light “Ⓐ”

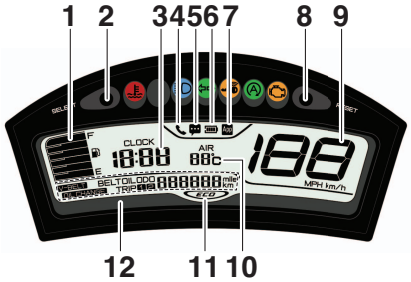
This indicator light comes on when the Stop and Start System activates. The indicator light will flash when the engine is automatically stopped by the Stop and Start System.

TIP

Even if the Stop and Start Switch is set to “Ⓐ”, this indicator light may not come on. (See page 4-1.)

EAU86814

Multi-function meter unit



1. Fuel meter
2. Selection button “SELECT”
3. Clock
4. Incoming call notification icon “ ”
5. Incoming notification icon “ ”
6. Smartphone battery level meter
7. App connect icon
8. Reset button “RESET”
9. Speedometer
10. Air temperature display
11. Eco indicator “ECO”
12. Multi-function display

EWA12423

WARNING

Be sure to stop the vehicle before making any setting changes to the multi-function meter unit. Changing

settings while riding can distract the operator and increase the risk of an accident.

EAUU2500

Incoming notification icon "" (If CCU is equipped)

This icon flashes for 10 seconds when the connected smartphone receives an SMS, E-mail or other notification. After that, the icon stays on until you turn the vehicle off.

TIP

- This function works only when the smartphone is connected to the vehicle.
- Notification setting is needed for each application at the connected smartphone in advance.

EAUU2490

Incoming call notification icon "" (If CCU is equipped)

This icon flashes when there is an incoming call to the connected smartphone. If you do not answer the call, the icon stays on until you turn the vehicle off.

TIP

This function works only when the smartphone is connected to the vehicle.

EAUA1380

App Connect icon (If CCU is equipped)

This icon comes on when CCU and smartphone is connected via MyRide App.

TIP

If CCU is equipped:
Even if the smartphone is not connected, when the vehicle is turned on, this icon should come on for a few seconds. Otherwise have a Yamaha dealer check the CCU and the electrical circuit.

EAUA1390

Smartphone battery level meter (If CCU is equipped)

This meter indicates the current battery level of the connected smartphone. The display segments of the meter disappear from full to blank as the battery level decreases. When approximately 10% or less of the battery remains, the last segment starts flashing.

TIP

If CCU is equipped:
Even if the smartphone is not connected, when the vehicle is turned on, this icon should come on for a few seconds. Otherwise have a Yamaha dealer check the CCU and the electrical circuit.

EAUU2261

Switching the display units

The display units can be switched between kilometers and miles.

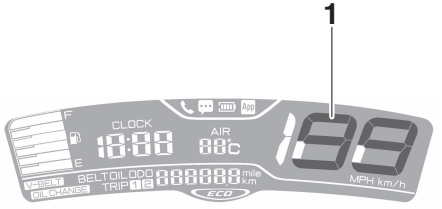
To switch the display units

1. With the "SELECT" button, display the odometer.
2. Press and hold the "SELECT" button to switch the display units between km/h and MPH.

6

Speedometer

EAU86831

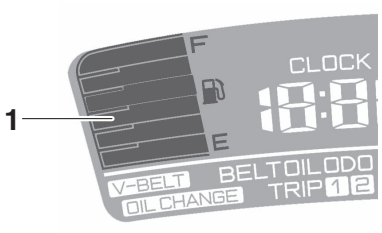


1. Speedometer

The speedometer shows the vehicle's traveling speed.

Fuel meter

EAU86842



1. Fuel meter

The fuel meter indicates the amount of fuel in the fuel tank. The display segments of the fuel meter disappear from "F" (full) towards "E" (empty) as the fuel level decreases. When approximately 1.6 L (0.42 US gal, 0.35 Imp.gal) of fuel remains, the last segment starts flashing. Refuel as soon as possible.

TIP

If a problem is detected in the electrical circuit, the fuel level segments will flash repeatedly. If this occurs, have a Yamaha dealer check the vehicle.

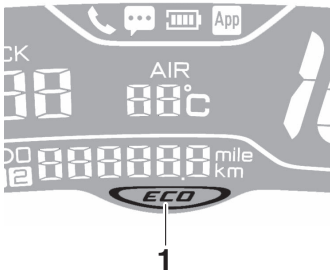
ECAE0121

NOTICE

Do not let the vehicle run completely out of fuel. This may cause damage to the catalytic converter.

Eco indicator

EAU90821



1. Eco indicator light "ECO"

This indicator comes on when the vehicle is being operated in an environmentally friendly, fuel-efficient manner. The indicator goes off when the vehicle is stopped.

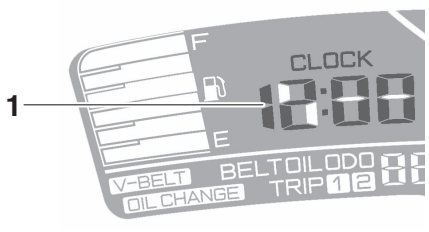
TIP

Consider the following tips to reduce fuel consumption:

- Avoid high engine speeds during acceleration.
- Travel at a constant speed.
- Select the transmission gear that is appropriate for the vehicle speed.

EAU87290

Clock



1. Clock

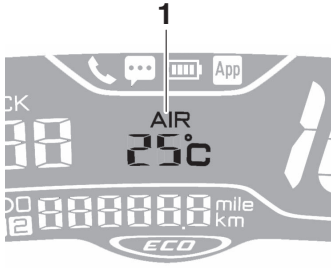
The clock uses a 12-hour time system.

To set the clock

1. Push both the “SELECT” button and “RESET” button until the hour digits start flashing.
2. Use the “RESET” button to set the hours.
3. Push the “SELECT” button and the minute digits start flashing.
4. Use the “RESET” button to set the minutes.
5. Push the “SELECT” button to confirm the settings.

EAUU2270

Air temperature display



1. Outside air temperature display

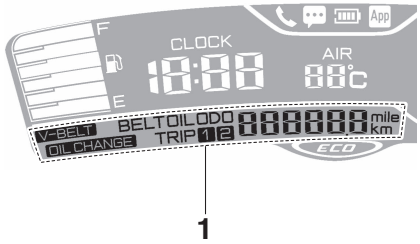
This display shows the air temperature from –9 °C to 50 °C in 1 °C increments. The temperature displayed may vary from the ambient temperature.

TIP

- When the external temperature exceeds the display range., “--” is displayed.
- The accuracy of the temperature reading may be affected when riding slowly (approximately under 20 km/h [12 mi/h]) or when stopped at traffic signals, railroad crossings, etc.

EAUU2361

Multi-function display



1. Multi-function display

The multi-function display is equipped with the following:

- an odometer (ODO)
- two tripmeters (TRIP 1 and TRIP 2)
- a fuel reserve tripmeter (F)
- an oil change tripmeter (OIL TRIP)
- a V-belt replacement tripmeter (BELT TRIP)

Push the “SELECT” button to change the display in the following order:

ODO → TRIP (1) → TRIP (2) → F → OIL TRIP → BELT TRIP → ODO

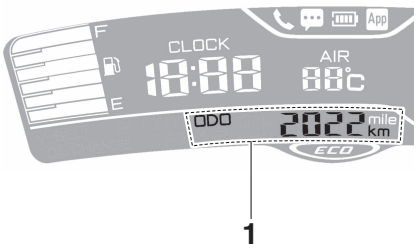
6

TIP

The fuel reserve tripmeter appears only when you are low on fuel.

EAU86891

Odometer



1. Odometer

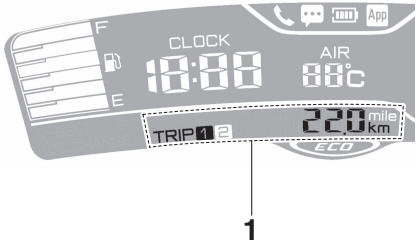
The odometer shows the total distance traveled by the vehicle.

TIP

The odometer will lock at “999999” and cannot be reset.

EAU88050

Tripmeters



1. Tripmeter

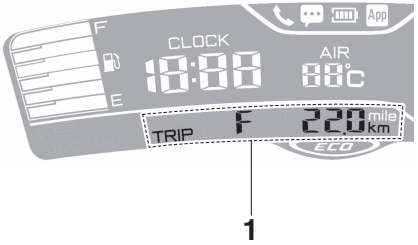
The tripmeters show the distance traveled since they were last reset.
To reset a tripmeter, change the display to the tripmeter you want to reset, and then push the “RESET” button until it is reset.

TIP

The tripmeters will reset and continue counting after 9999.9 is reached.

EAU87600

Fuel reserve tripmeter



1. Fuel reserve tripmeter

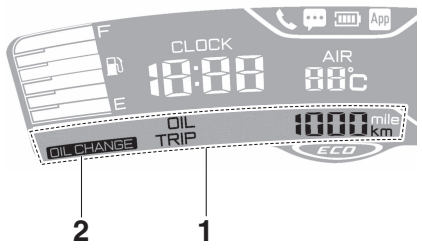
If the last segment of the fuel meter starts flashing, the display automatically changes to the fuel reserve tripmeter “TRIP F” and starts counting the distance traveled from that point.
To reset the fuel reserve tripmeter, push the “RESET” button until it is reset.

TIP

If you do not reset the fuel reserve tripmeter manually, it will reset automatically and disappear from the display after refueling and traveling 5 km (3 mi).

Oil change tripmeter

EAUU2280



1. Oil change tripmeter
2. Oil change indicator “OIL CHANGE”

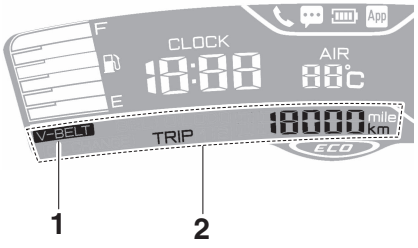
This tripmeter shows the distance traveled since the last engine oil change. The oil change indicator “OIL CHANGE” will flash at the initial 1000 km (600 mi), the next 5000 km (3125 mi), and then every 6000 km (3750 mi) thereafter to indicate that the engine oil should be changed.
After changing the engine oil, reset the oil change indicator and the oil change tripmeter. To reset them both, select the oil change tripmeter, and then push the “RESET” button for one second. While “OIL CHANGE” is flashing, push the “RESET” button for three to four seconds. The oil change tripmeter will be reset and the oil change indicator will turn off.

TIP

If the engine oil is changed before the oil change indicator comes on (i.e., before the periodic oil change interval has been reached), the oil change tripmeter must be reset for the oil change indicator to come on at the correct time.

V-belt replacement tripmeter

EAU87700



1. V-belt replacement indicator “V-BELT”
2. V-belt replacement tripmeter

This tripmeter shows the distance traveled since the V-belt was last replaced. The V-belt replacement indicator “V-BELT” will flash at every 18000 km (10500 mi) to indicate that the V-belt should be replaced.
To reset both the tripmeter and the indicator, select the V-belt replacement tripmeter, and then push the “RESET” button until “V-BELT” and the tripmeter start flashing. While “V-BELT” and the tripmeter are flashing, push the “RESET” button until the tripmeter is reset.

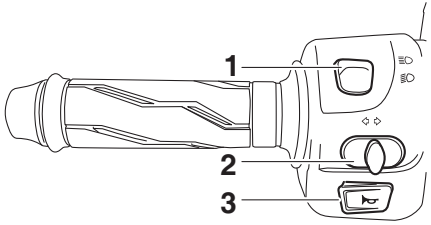
TIP

When the V-belt is replaced, the tripmeter and indicator must be reset. Otherwise, the V-belt replacement indicator will not come on at the correct time.

EAU1234T

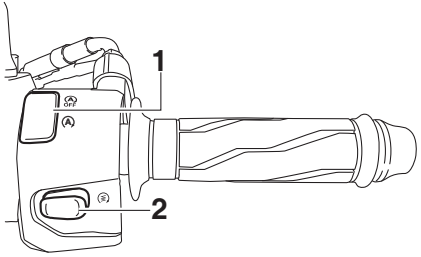
Handlebar switches

Left



1. Dimmer switch "≣○/≣○"
2. Turn signal switch "⇦/⇨"
3. Horn switch "🔊"

Right



1. Stop and Start System switch "Ⓐ/Ⓐ OFF"
2. Start switch "Ⓢ"

EAU12402

Dimmer switch "≣○/≣○"

Set this switch to "≣○" for the high beam and to "≣○" for the low beam.

EAU12461

Turn signal switch "⇦/⇨"

To signal a right-hand turn, push this switch to "⇨". To signal a left-hand turn, push this switch to "⇦". When released, the switch returns to the center position. To cancel the turn signal lights, push the switch in after it has returned to the center position.

EAU12501

Horn switch "🔊"

Press this switch to sound the horn.

EAU12722

Start switch "Ⓢ"

With the sidestand up, push this switch while applying the front or rear brake to crank the engine with the starter. See page 8-2 for starting instructions prior to starting the engine.

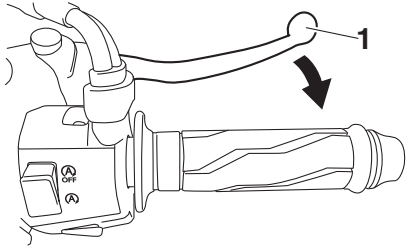
EAU76391

Stop and Start System switch "Ⓐ/Ⓐ OFF"

To turn on the Stop and Start System, set the switch to "Ⓐ". To turn off the Stop and Start System, set this switch to "Ⓐ OFF".

EAU12902

Front brake lever

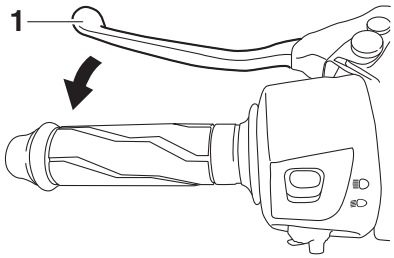


1. Front brake lever

The front brake lever is located on the right side of the handlebar. To apply the front brake, pull this lever toward the throttle grip.

EAUS1964

Rear brake lever



1. Rear brake lever

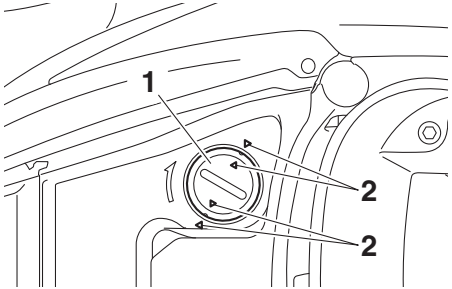
The rear brake lever is located on the left side of the handlebar. To apply the rear brake, pull the lever toward the handlebar grip.
This model is equipped with a unified brake system.
When pulling the rear brake lever, the rear brake and a portion of the front brake are applied. For full braking performance, apply both brake levers simultaneously.

TIP

- As the unified brake system is mechanical, additional free play can be felt in the front brake lever when the rear brake lever is being pulled.
- The unified brake system does not function when the front brake is applied alone.

EAU37474

Fuel tank cap



1. Fuel tank cap
2. "△" mark

To remove the fuel tank cap

1. Open the seat. (See page 6-13.)
2. Turn the fuel tank cap counterclockwise and pull it off.

To install the fuel tank cap

1. Insert the fuel tank cap into the tank opening and turn it clockwise until the "△" marks on the cap and tank cover are aligned.
2. Close the seat.

EWA11092

⚠ WARNING

Make sure that the fuel tank cap is properly closed after filling fuel. Leaking fuel is a fire hazard.

EAU13222

Fuel

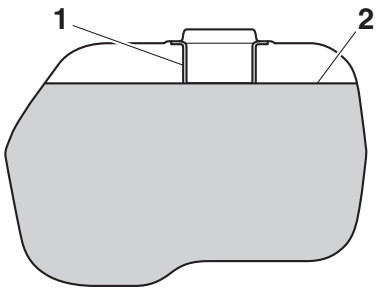
Make sure there is sufficient gasoline in the tank.

EWA10882

⚠ WARNING

Gasoline and gasoline vapors are extremely flammable. To avoid fires and explosions and to reduce the risk of injury when refueling, follow these instructions.

1. Before refueling, turn off the engine and be sure that no one is sitting on the vehicle. Never refuel while smoking, or while in the vicinity of sparks, open flames, or other sources of ignition such as the pilot lights of water heaters and clothes dryers.
2. Do not overfill the fuel tank. When refueling, be sure to insert the pump nozzle into the fuel tank filler hole. Stop filling when the fuel reaches the bottom of the filler tube. Because fuel expands when it heats up, heat from the engine or the sun can cause fuel to spill out of the fuel tank.



1. Fuel tank filler tube
2. Maximum fuel level

3. Wipe up any spilled fuel immediately. ***NOTICE:*** **Immediately wipe off spilled fuel with a clean, dry, soft cloth, since fuel may deteriorate painted surfaces or plastic parts.** [ECA10072]
4. Be sure to securely close the fuel tank cap.

EWA15152

⚠ WARNING

Gasoline is poisonous and can cause injury or death. Handle gasoline with care. Never siphon gasoline by mouth. If you should swallow some gasoline or inhale a lot of gasoline vapor, or get some gasoline in your eyes, see your doctor immediately. If gasoline spills on your skin, wash with soap and water. If gasoline spills on your clothing, change your clothes.

EAU76750

Recommended fuel:
Regular unleaded gasoline (E10 acceptable)
Fuel tank capacity:
7.2 L (1.9 US gal, 1.6 Imp.gal)

ECA11401

NOTICE

Use only unleaded gasoline. The use of leaded gasoline will cause severe damage to internal engine parts, such as the valves and piston rings, as well as to the exhaust system.



TIP

- This mark identifies the recommended fuel for this vehicle as specified by European regulation (EN228).
- Check that gasoline nozzle has the same identifier when fueling.

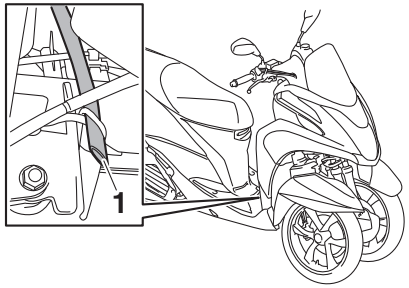
Your Yamaha engine has been designed to use regular unleaded gasoline with a research octane number of 95 or higher. If knocking (or pinging) occurs, use a gasoline of a different brand or premium unleaded fuel. Use of unleaded fuel will extend spark plug life and reduce maintenance costs.

Gasohol

There are two types of gasohol: gasohol containing ethanol and that containing methanol. Gasohol containing ethanol can be used if the ethanol content does not exceed 10% (E10). Gasohol containing methanol is not recommended by Yamaha because it can cause damage to the fuel system or vehicle performance problems.

EAU80201

Fuel tank overflow hose



1. Fuel tank overflow hose

Before operating the vehicle:

- Check the fuel tank overflow hose connection.
- Check the fuel tank overflow hose for cracks or damage, and replace it if necessary.
- Make sure that the end of the fuel tank overflow hose is not blocked, and clean it if necessary.
- Make sure that the end of the fuel tank overflow hose is positioned as shown.

TIP

See page 9-10 for canister information.

EAU13435

Catalytic converter

The exhaust system contains catalytic converter(s) to reduce harmful exhaust emissions.

EWA10863

⚠ WARNING

The exhaust system is hot after operation. To prevent a fire hazard or burns:

- **Do not park the vehicle near possible fire hazards such as grass or other materials that easily burn.**
- **Park the vehicle in a place where pedestrians or children are not likely to touch the hot exhaust system.**
- **Make sure that the exhaust system has cooled down before doing any maintenance work.**
- **Do not allow the engine to idle more than a few minutes. Long idling can cause a build-up of heat.**

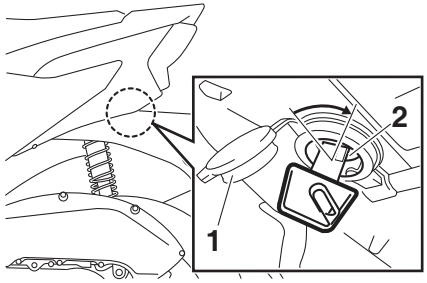
EAU89400

Seat

To open the seat

Via the main switch
Turn the main switch to “OPEN”, and then push the “SEAT” button. (See page 3-9.)

With the mechanical key
1. Open the keyhole cover.
2. Insert the mechanical key into the seat lock, and then turn it clockwise.



1. Keyhole cover
2. Seat lock

3. Lift the rear of the seat.

ECA24020

NOTICE

Make sure that the keyhole cover is installed when the mechanical key is not being used.

To close the seat

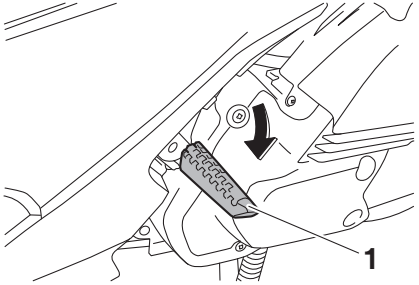
Push the rear of the seat down to lock it in place.

TIP

Make sure that the seat is properly secured before riding.

EAUT3711

Passenger footrest



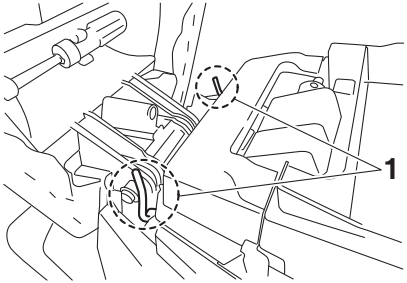
1. Passenger footrest

To use the passenger footrest, pull it out as shown.
To retract the passenger footrest, push it back to original position.

6

Helmet holders

EAU37482



1. Helmet holder

The helmet holders are located under the seat.

To secure a helmet to a helmet holder

1. Open the seat. (See page 6-13.)
2. Attach a helmet to a helmet holder, and then securely close the seat. **WARNING! Never ride with a helmet attached to the helmet holder, since the helmet may hit objects, causing loss of control and possibly an accident.** [EWA10162]

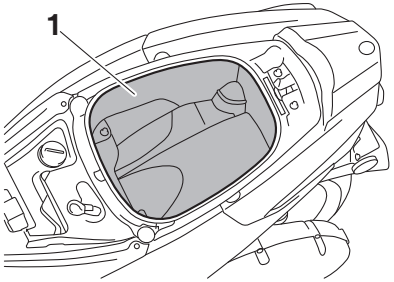
To release a helmet from a helmet holder

Open the seat, remove the helmet from the helmet holder, and then close the seat.

Storage compartment

EAU89052

The storage compartment is located under the seat. (See page 3-9.)



1. Storage compartment

TIP

- The seat/storage compartment can be opened using the smart key system or the mechanical key.
- Some helmets cannot be stored in the storage compartment because of their size or shape.

To open the seat/storage compartment via the main switch

Turn the main switch to “OPEN”, and then push the “SEAT” button.

To open the seat/storage compartment with the mechanical key

1. Open the keyhole cover.
2. Insert the mechanical key into the seat lock, and then turn it clockwise.

TIP

Be sure to close the seat before starting off.

ECA24020

NOTICE

Make sure that the keyhole cover is installed when the mechanical key is not being used.

ECA21150

NOTICE

Keep the following points in mind when using the storage compartment.

- **Since the storage compartment accumulates heat when exposed to the sun and/or the engine heat, do not store anything susceptible to heat, consumables or flammable items inside it.**
- **To avoid humidity from spreading through the storage compartment, wrap wet articles in a plastic bag before storing them in the compartment.**
- **Since the storage compartment may get wet while the vehicle is being washed, wrap any articles stored in the compartment in a plastic bag.**
- **Do not keep anything valuable or breakable in the storage compartment.**

EWA10962

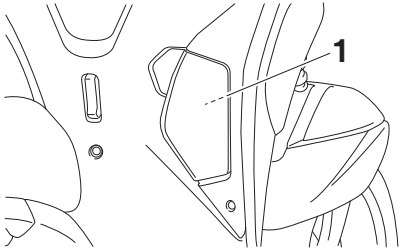
⚠ WARNING

- **Do not exceed the load limit of 5 kg (11 lb) for the storage compartment.**
- **Do not exceed the maximum load of 167 kg (368 lb) for the vehicle.**

EAU74411

Accessory box

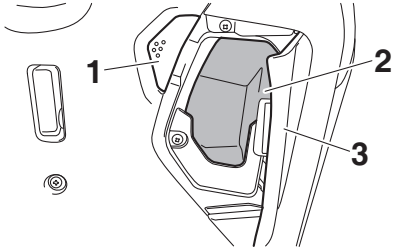
The accessory box is located as shown.



1. Accessory box

To open the accessory box

Push the accessory box button, and then open the accessory box lid.



1. Accessory box button
2. Accessory box
3. Accessory box lid

To close the accessory box
Fold the accessory box lid down.

ECA23690

NOTICE

Do not place heat-sensitive items in the accessory box. The accessory box can get hot when the vehicle is in direct sunlight.

EWA18530

⚠ WARNING

- **Do not exceed the load limit of 0.15 kg (0.33 lb) for the accessory box.**
- **Do not exceed the maximum load of 167 kg (368 lb) for the vehicle.**

EAU61380

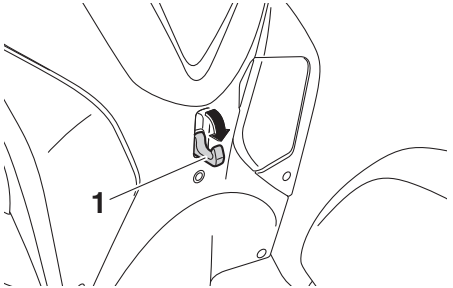
Luggage hook

To use the luggage hook, pull it out as shown.
To retract the luggage hook, push it back to its original position.

EWAT1032

⚠ WARNING

- **Do not exceed the load limit of 1.0 kg (2.2 lb) for the luggage hook.**
- **Do not exceed the maximum load of 167 kg (368 lb) for the vehicle.**



1. Luggage hook

EAU76780

Sidestand

The sidestand is located on the left side of the frame. Raise the sidestand or lower it with your foot while holding the vehicle upright.

TIP

- The built-in sidestand switch is part of the ignition circuit cut-off system, which cuts the ignition in certain situations. (See the following section for an explanation of the ignition circuit cut-off system.)
- When the sidestand is lowered, the Stop and Start System is deactivated.

EWA10242

⚠ WARNING

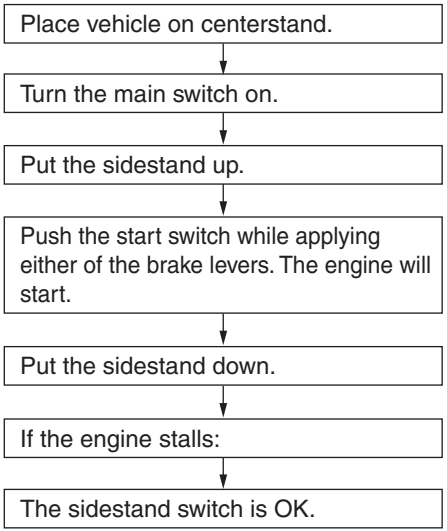
The vehicle must not be ridden with the sidestand down, or if the sidestand cannot be properly moved up (or does not stay up), otherwise the sidestand could contact the ground and distract the operator, resulting in a possible loss of control. Yamaha's ignition circuit cut-off system has been designed to assist the operator in fulfilling the responsibility of raising the sidestand before starting off. Therefore, check this system regularly and have a Yamaha dealer repair it if it does not function properly.

EAUT1098

Ignition circuit cut-off system

Check the operation of the sidestand switch according to the following procedure.

6



⚠ WARNING

- **The vehicle must be placed on the centerstand during this inspection.**
- **If a malfunction is found, have the vehicle inspected before riding.**

EAU1559B

Inspect your vehicle each time you use it to make sure the vehicle is in safe operating condition. Always follow the inspection and maintenance procedures and schedules described in the Owner's Manual.

EWA11152

⚠ WARNING

Failure to inspect or maintain the vehicle properly increases the possibility of an accident or equipment damage. Do not operate the vehicle if you find any problem. If a problem cannot be corrected by the procedures provided in this manual, have the vehicle inspected by a Yamaha dealer.

Before using this vehicle, check the following points:

ITEM	CHECKS	PAGE
Fuel	• Check fuel level in fuel tank. • Refuel if necessary. • Check fuel line for leakage. • Check fuel tank overflow hose for obstructions, cracks or damage, and check hose connection.	6-10, 6-12
Engine oil	• Check oil level in engine. • If necessary, add recommended oil to specified level. • Check vehicle for oil leakage.	9-10
Final transmission oil	• Check vehicle for oil leakage.	9-11
Coolant	• Check coolant level in reservoir. • If necessary, add recommended coolant to specified level. • Check cooling system for leakage.	9-12
Front brake	• Check operation. • If soft or spongy, have Yamaha dealer bleed hydraulic system. • Check brake pads for wear. • Replace if necessary. • Check fluid level in reservoir. • If necessary, add specified brake fluid to specified level. • Check hydraulic system for leakage.	9-19, 9-19

For your safety – pre-operation checks

ITEM	CHECKS	PAGE
Rear brake	• Check operation. • If soft or spongy, have Yamaha dealer bleed hydraulic system. • Check brake pads for wear. • Replace if necessary. • Check fluid level in reservoir. • If necessary, add specified brake fluid to specified level. • Check hydraulic system for leakage.	9-19, 9-19
Throttle grip	• Make sure that operation is smooth. • Check throttle grip free play. • If necessary, have Yamaha dealer adjust throttle grip free play and lubricate cable and grip housing.	9-15, 9-21
Control cables	• Make sure that operation is smooth. • Lubricate if necessary.	9-21
Wheels and tires	• Check for damage. • Check tire condition and tread depth. • Check air pressure. • Correct if necessary.	9-16, 9-17
Brake levers	• Make sure that operation is smooth. • Lubricate lever pivoting points if necessary.	9-22
Centerstand, sidestand	• Make sure that operation is smooth. • Lubricate pivots if necessary.	9-22
Chassis fasteners	• Make sure that all nuts, bolts and screws are properly tightened. • Tighten if necessary.	—
Instruments, lights, signals and switches	• Check operation. • Correct if necessary.	—
Sidestand switch	• Check operation of ignition circuit cut-off system. • If system is not working correctly, have Yamaha dealer check vehicle.	6-17

EAU15952

Read the Owner's Manual carefully to become familiar with all controls. If there is a control or function you do not understand, ask your Yamaha dealer.

EWA10272

⚠ WARNING

Failure to familiarize yourself with the controls can lead to loss of control, which could cause an accident or injury.

EAU16842

Engine break-in

There is never a more important period in the life of your engine than the period between 0 and 1600 km (1000 mi). For this reason, you should read the following material carefully.

Since the engine is brand new, do not put an excessive load on it for the first 1600 km (1000 mi). The various parts in the engine wear and polish themselves to the correct operating clearances. During this period, prolonged full-throttle operation or any condition that might result in engine overheating must be avoided.

EAU74660

0–1000 km (0–600 mi)

Avoid prolonged operation above 1/3 throttle. ***NOTICE:*** **After 1000 km (600 mi) of operation, be sure to replace the engine oil and clean the oil strainer, and replace the final transmission oil.** [ECA23650]

1000–1600 km (600–1000 mi)

Avoid prolonged operation above 1/2 throttle.

1600 km (1000 mi) and beyond

The vehicle can now be operated normally.

ECA10271

NOTICE

If any engine trouble should occur during the engine break-in period, immediately have a Yamaha dealer check the vehicle.

8

EAUU2342

Starting the engine

The ignition circuit cut-off system will enable starting when the sidestand is up.

To start the engine

1. Turn the main switch on.
2. Confirm the indicator and warning light(s) come on for a few seconds, and then go off. (See page 6-1.)

TIP

Do not start the engine if the malfunction indicator light remains on.

ECA26710

NOTICE

Do not continue to operate the vehicle if a warning light remains on. Have a Yamaha dealer check the vehicle.

3. Close the throttle completely.
4. While applying the front or rear brake, push the start switch.
5. Release the start switch when the engine starts, or after 5 seconds. Wait 10 seconds before pressing the switch again to allow battery voltage to restore.

ECA11043

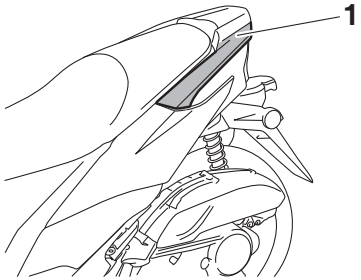
NOTICE

For maximum engine life, never accelerate hard when the engine is cold!

EAU60640

Starting off

1. While pulling the rear brake lever with your left hand and holding the grab bar with your right hand, push the vehicle off the centerstand.

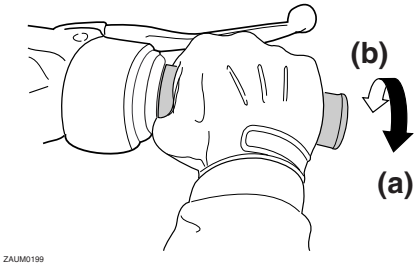


1. Grab bar

2. Sit astride the seat, and then adjust the rear view mirrors.
3. Switch the turn signals on.
4. Check for oncoming traffic, and then slowly turn the throttle grip (on the right) in order to take off.
5. Switch the turn signals off.

EAU16783

Acceleration and deceleration



ZAUM0199

The speed can be adjusted by opening and closing the throttle. To increase the speed, turn the throttle grip in direction (a). To reduce the speed, turn the throttle grip in direction (b).

ECA12682

NOTICE

- **Use the brake when stopping on an uphill slope. Holding the vehicle at a stop with throttle operation will cause the clutch to heat up, causing damage to the clutch.**
- **Do not rev the throttle unnecessarily, otherwise the malfunction indicator light (MIL)/engine trouble warning light may come on.**

EAU60650

Braking

EWA17790

⚠ WARNING

- **Avoid braking hard or suddenly (especially when leaning over to one side), otherwise the vehicle may skid or overturn.**
- **Railroad crossings, streetcar rails, iron plates on road construction sites, and manhole covers become extremely slippery when wet. Therefore, slow down when approaching such areas and cross them with caution.**
- **Keep in mind that braking on a wet road is much more difficult.**
- **Ride slowly down a hill, as braking downhill can be very difficult.**

1. Close the throttle completely.
2. Apply both front and rear brakes simultaneously while gradually increasing the pressure.

EAU16821

Tips for reducing fuel consumption

Fuel consumption depends largely on your riding style. Consider the following tips to reduce fuel consumption:

- Avoid high engine speeds during acceleration.
- Avoid high engine speeds with no load on the engine.
- Turn the engine off instead of letting it idle for an extended length of time (e.g., in traffic jams, at traffic lights or at railroad crossings).

EAU76803

Parking

When parking, turn the vehicle power off. After turning off the main switch, be sure to remove the key and take it with you.

EWA18840

⚠ WARNING

- **Since the engine and exhaust system can become very hot, park in a place where pedestrians or children are not likely to touch them and be burned.**
- **Do not park on a slope or on soft ground, otherwise the vehicle may overturn, increasing the risk of a fuel leak and fire.**
- **Do not park near grass or other flammable materials which might catch fire.**
- **If the Stop and Start System is left turned on, the battery could become discharged and it may not be possible to restart the engine due to insufficient battery voltage.**

EAUS1824

Periodic inspection, adjustment, and lubrication will keep your vehicle in the safest and most efficient condition possible. Safety is an obligation of the vehicle owner/operator. The most important points of vehicle inspection, adjustment, and lubrication are explained on the following pages.

The intervals given in the periodic maintenance charts should be simply considered as a general guide under normal riding conditions. However, depending on the weather, terrain, geographical location, and individual use, the maintenance intervals may need to be shortened.

EWA10322

⚠ WARNING

Failure to properly maintain the vehicle or performing maintenance activities incorrectly may increase your risk of injury or death during service or while using the vehicle. If you are not familiar with vehicle service, have a Yamaha dealer perform service.

EWA15123

⚠ WARNING

Turn off the engine when performing maintenance unless otherwise specified.

- **A running engine has moving parts that can catch on body parts or clothing and electrical parts that can cause shocks or fires.**
- **Running the engine while servicing can lead to eye injury, burns, fire, or carbon monoxide poisoning – possibly leading to death. See page 1-2 for more information about carbon monoxide.**

EWA10331

⚠ WARNING

This scooter is designed for use on paved roads only. If this scooter is operated in abnormally dusty, muddy or wet conditions, the air filter element should be cleaned or replaced more frequently, otherwise rapid engine wear may result. Consult a Yamaha dealer for proper maintenance intervals.

EWA15461

⚠ WARNING

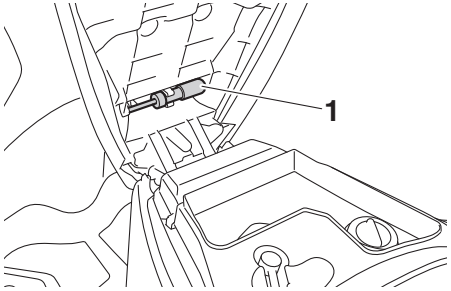
Brake discs, calipers, drums, and linings can become very hot during use. To avoid possible burns, let brake components cool before touching them.

EAU17303

Emission controls not only function to ensure cleaner air, but are also vital to proper engine operation and maximum performance. In the following periodic maintenance charts, the services related to emissions control are grouped separately. These services require specialized data, knowledge, and equipment. Maintenance, replacement, or repair of the emission control devices and systems may be performed by any repair establishment or individual that is certified (if applicable). Yamaha dealers are trained and equipped to perform these particular services.

EAU85230

Tool kit



1. Tool kit

The tool kit is in the location shown. The information included in this manual and the tools provided in the tool kit are intended to assist you in the performance of preventive maintenance and minor repairs. However, a torque wrench and other tools are necessary to perform certain maintenance work correctly.

TIP

If you do not have the tools or experience required for a particular job, have your Yamaha dealer perform it for you.

EAU74580

TIP

- **The annual checks must be performed every year, except if a kilometer-based maintenance, or for the UK, a mileage-based maintenance, is performed instead.**
- From 20000 km (12000 mi), repeat the maintenance intervals starting from 4000 km (2400 mi).
- Items marked with an asterisk should be performed by a Yamaha dealer as they require special tools, data and technical skills.

EAUU2290

Periodic maintenance chart for the emission control system

NO.		ITEM	CHECK OR MAINTENANCE JOB	ODOMETER READING					ANNUAL CHECK
				1000 km (600 mi)	4000 km (2400 mi)	8000 km (4800 mi)	12000 km (7200 mi)	16000 km (9600 mi)	
1	*	**Fuel line**	• Check fuel hoses for cracks or damage. • Replace if necessary.		√	√	√	√	√
2	*	**Spark plug**	• Check condition. • Adjust gap and clean.		√		√		
			• Replace.			√		√	
3	*	**Valve clearance**	• Check and adjust.	Every 12000 km (7200 mi)					
4	*	**Fuel injection**	• Check engine idle speed.	√	√	√	√	√	√
5	*	**Exhaust system**	• Check for leakage. • Tighten if necessary. • Replace gasket if necessary.	Every 12000 km (7200 mi)					
6	*	**Evaporative emission control system**	• Check control system for damage. • Replace if necessary.			√		√	

9

EAUU2301

General maintenance and lubrication chart

NO.		ITEM	CHECK OR MAINTENANCE JOB	ODOMETER READING					ANNUAL CHECK
				1000 km (600 mi)	4000 km (2400 mi)	8000 km (4800 mi)	12000 km (7200 mi)	16000 km (9600 mi)	
1	*	**Diagnostic system check**	• Perform dynamic inspection using Yamaha diagnostic tool. • Check the error codes.	√	√	√	√	√	√
2		**Air filter element**	• Replace.	Every 20000 km (12000 mi)					
3		**Air filter case check hose**	• Clean.	√	√	√	√	√	
4	*	**V-belt case air filter element**	• Clean. • Replace if necessary.		√	√	√	√	√
5	*	**Front brake**	• Check operation, fluid level, and for fluid leakage. • Replace brake pads if necessary.	√	√	√	√	√	√
6	*	**Rear brake**	• Check operation, fluid level, and for fluid leakage. • Check brake lever free play, and adjust if necessary. • Replace brake pads if necessary.	√	√	√	√	√	√
7	*	**Brake hoses**	• Check for cracks or damage. • Check for correct routing and clamping.		√	√	√	√	√
			• Replace.	Every 4 years					
8	*	**Brake fluid**	• Change.	Every 2 years					
9	*	**Wheels**	• Check runout and for damage. • Replace if necessary.		√	√	√	√	
			• Balance the front wheels.	Whenever the tires or wheels have been changed or replaced.					

9

NO.		ITEM	CHECK OR MAINTENANCE JOB	ODOMETER READING					ANNUAL CHECK
				1000 km (600 mi)	4000 km (2400 mi)	8000 km (4800 mi)	12000 km (7200 mi)	16000 km (9600 mi)	
10	*	**Tires**	• Check tread depth and for damage. • Replace if necessary. • Check air pressure. • Correct if necessary.		√	√	√	√	√
11	*	**Wheel bearings**	• Check bearing for looseness or damage.		√	√	√	√	
12	*	**Steering system**	• Check bearing play and steering for roughness. • Check steering tie rod, and replace if necessary.	√	√	√	√	√	
			• Lubricate with lithium-soap-based grease.	Every 24000 km (14000 mi)					
13	*	**Leaning system**	• Check bearing for looseness or damage.	√	√	√	√	√	
14	*	**Chassis fasteners**	• Make sure that all nuts, bolts and screws are properly tightened.		√	√	√	√	√
15		**Front and rear brake lever pivot shaft**	• Lubricate with silicone grease.		√	√	√	√	√
16	*	**Unified brake system**	• Lubricate link pivots and moving parts with silicone grease. • Lubricate cable end with lithium-soap-based grease.		√	√	√	√	
17		**Sidestand, centerstand**	• Check operation. • Lubricate with lithium-soap-based grease.		√	√	√	√	√

NO.		ITEM	CHECK OR MAINTENANCE JOB	ODOMETER READING					ANNUAL CHECK
				1000 km (600 mi)	4000 km (2400 mi)	8000 km (4800 mi)	12000 km (7200 mi)	16000 km (9600 mi)	
18	*	**Sidestand switch**	• Check operation and replace if necessary.	√	√	√	√	√	√
19	*	**Front fork**	• Check operation and for oil leakage. • Replace if necessary.		√	√	√	√	
20	*	**Shock absorber assemblies**	• Check operation and for oil leakage. • Replace if necessary.		√	√	√	√	
21	*	**Engine oil**	• Change (warm engine before draining). • Check oil level and vehicle for oil leakage.	At the initial interval and when the oil change indicator flashes or comes on.					√
22	*	**Engine oil strainer**	• Clean.	√		√		√	
23	*	**Final transmission oil**	• Check vehicle for oil leakage.	√	√	√	√	√	
			• Change.	√	Every 12000 km (7200 mi)				
24	*	**Cooling system**	• Check coolant level and vehicle for coolant leakage.		√	√	√	√	√
			• Change.	Every 3 years					
25	*	**V-belt**	• Replace.	When the V-belt replacement indicator flashes or comes on					
26	*	**Front and rear brake switches**	• Check operation.	√	√	√	√	√	√
27	*	**Moving parts and cables**	• Lubricate.		√	√	√	√	√

9

NO.		ITEM	CHECK OR MAINTENANCE JOB	ODOMETER READING					ANNUAL CHECK
				1000 km (600 mi)	4000 km (2400 mi)	8000 km (4800 mi)	12000 km (7200 mi)	16000 km (9600 mi)	
28	*	**Throttle grip housing and cable**	• Check operation and free play. • Adjust the throttle cable free play if necessary. • Lubricate the throttle grip housing and cable.		√	√	√	√	√
29	*	**Lights, signals and switches**	• Check operation. • Adjust headlight beam.	√	√	√	√	√	√

EAU72781

TIP

Air filters

- The engine air filter uses a disposable oil-coated paper element. This element cannot be cleaned with compressed air, doing so will only damage it.
- If you often ride in the rain or in dusty areas, have the engine air filter and V-belt air filter elements serviced more frequently.

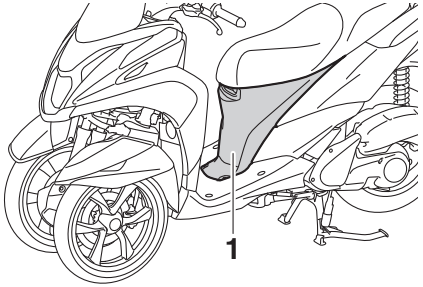
Hydraulic brake service

- Regularly check the brake fluid levels in the reservoirs, and refill as necessary.
- Replace the internal components of the brake master cylinders and calipers, and change the brake fluid every 2 years.
- Replace the brake hoses every 4 years, or sooner if cracked or damaged.

EAU18752

Removing and installing the panel

The panel shown needs to be removed to perform some of the maintenance jobs described in this chapter. Refer to this section each time the panel needs to be removed and installed.



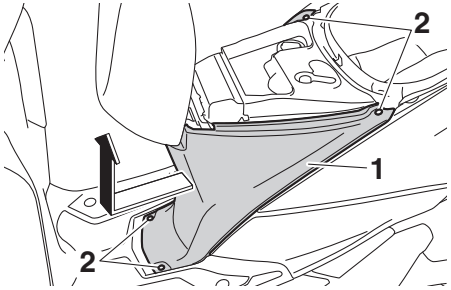
1. Panel A

EAU56942

Panel A

To remove the panel

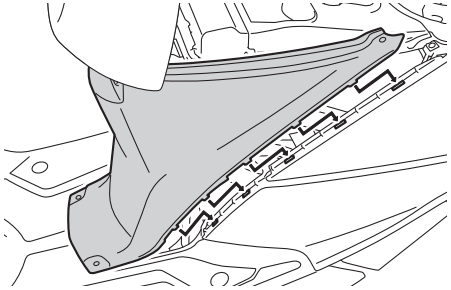
1. Open the seat. (See page 6-13.)
2. Remove the screws, and pull the panel off while closing the seat slightly as shown.



1. Panel A
2. Screw

To install the panel

1. Place the panel in the original position while closing the seat slightly, and then install the screws.



2. Close the seat.

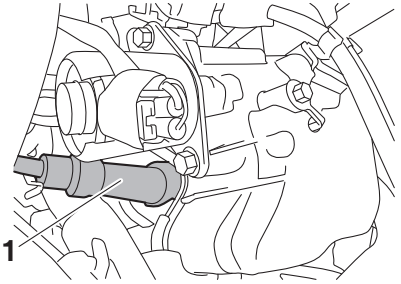
EAUT2077

Checking the spark plug

The spark plug is an important engine component, which is easy to check. Since heat and deposits will cause any spark plug to slowly erode, the spark plug should be removed and checked in accordance with the periodic maintenance and lubrication chart. In addition, the condition of the spark plug can reveal the condition of the engine.

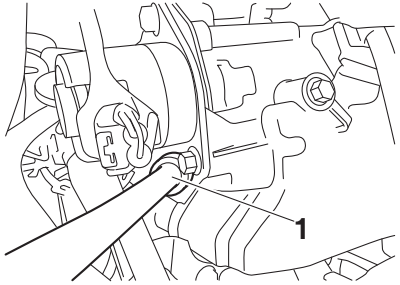
To remove the spark plug

1. Remove panel A. (See page 9-8.)
2. Remove the spark plug cap.



1. Spark plug cap

3. Remove the spark plug as shown, with a spark plug wrench available at a Yamaha dealer.



1. Spark plug wrench

To check the spark plug

1. Check that the porcelain insulator around the center electrode of the spark plug is a medium-to-light tan (the ideal color when the vehicle is ridden normally).

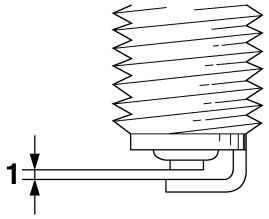
TIP

If the spark plug shows a distinctly different color, the engine could be operating improperly. Do not attempt to diagnose such problems yourself. Instead, have a Yamaha dealer check the vehicle.

2. Check the spark plug for electrode erosion and excessive carbon or other deposits, and replace it if necessary.

Specified spark plug:
NGK/CPR8EA-9

3. Measure the spark plug gap with a wire thickness gauge and, if necessary, adjust the gap to specification.



1. Spark plug gap

Spark plug gap:
0.8–0.9 mm (0.031–0.035 in)

To install the spark plug

1. Clean the surface of the spark plug gasket and its mating surface, and then wipe off any grime from the spark plug threads.
2. Install the spark plug with the spark plug wrench, and then tighten it to the specified torque.

Tightening torque:
Spark plug:
13 N·m (1.3 kgf·m, 9.6 lb·ft)

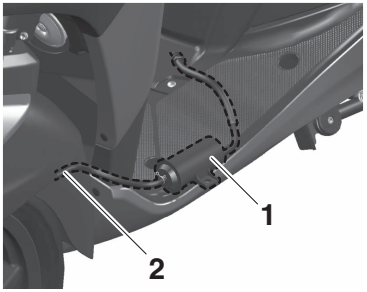
TIP

If a torque wrench is not available when installing a spark plug, a good estimate of the correct torque is 1/4–1/2 turn past finger tight. However, the spark plug should be tightened to the specified torque as soon as possible.

3. Install the spark plug cap.
4. Install the panel A.

EAU36113

Canister



1. Canister
2. Canister breather hose

This model is equipped with a canister to prevent the discharging of fuel vapor into the atmosphere. Before operating this vehicle, make sure to check the following:

- Check each hose connection.
- Check each hose and canister for cracks or damage. Replace if damaged.
- Make sure that the canister breather is not blocked, and if necessary, clean it.

EAUN3770

Engine oil and oil strainer

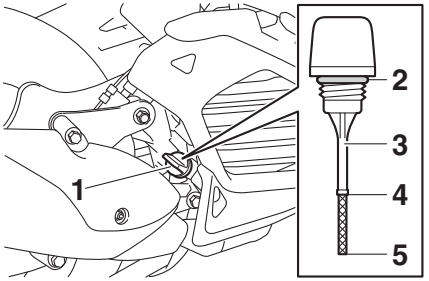
The engine oil level should be checked before each ride. In addition, the oil must be changed and the oil strainer cleaned at the intervals specified in the periodic maintenance and lubrication chart.

To check the engine oil level

1. Place the vehicle on the center-stand. A slight tilt to the side can result in a false reading.
2. Start the engine, warm it up for several minutes, and then turn it off.
3. Wait a few minutes until the oil settles, remove the engine oil filler cap, wipe the engine oil dipstick clean, insert it back into the oil filler hole (without screwing it in), and then remove it again to check the oil level. **WARNING! The muffler and muffler protector become very hot during use. To avoid possible burns, let the muffler and protector cool before removing the oil filler cap.** [EWA17810]

TIP

The engine oil should be between the tip of the dipstick and the maximum level mark.



1. Engine oil filler cap
2. O-ring
3. Engine oil dipstick
4. Maximum level mark
5. Tip of the engine oil dipstick

4. If the engine oil is not between the tip of the dipstick and the maximum level mark, add sufficient oil of the recommended type to raise it to the correct level.
5. Insert the dipstick into the oil filler hole, and then tighten the oil filler cap.

To change the engine oil and clean the oil strainer

Have a Yamaha dealer change the engine oil and clean the oil strainer.

EAU85450

Why Yamalube

YAMALUBE oil is a Genuine YAMAHA Part born of the engineers' passion and belief that engine oil is an important liquid engine component. We form teams of specialists in the fields of mechanical engineering, chemistry, electronics and track testing, and have them develop the engine together with the oil it will use. Yamalube oils take full advantage of the base oil's qualities and blend in the ideal balance of additives to make sure the final oil clears our performance standards. Thus, Yamalube mineral, semisynthetic and synthetic oils have their own distinct characters and value. Yamaha's experience gained over many years of research and development into oil since the 1960's helps make Yamalube the best choice for your Yamaha engine.

YAMALUBE®

EAUN3780

Final transmission oil

The final transmission case must be checked for oil leakage before each ride. If any leakage is found, have a Yamaha dealer check and repair your motorcycle. In addition, the final transmission oil must be changed at the intervals specified in the periodic maintenance and lubrication chart.

Have a Yamaha dealer change the final transmission oil.

EAU20071

Coolant

The coolant level should be checked before each ride. In addition, the coolant must be changed at the intervals specified in the periodic maintenance and lubrication chart.

EAU40047

To check the coolant level

1. Place the vehicle on the centerstand.

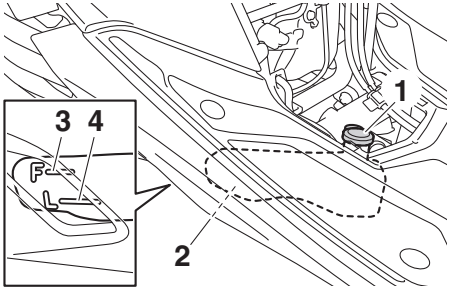
TIP

- The coolant level must be checked on a cold engine since the level varies with engine temperature.
- Make sure that the vehicle is positioned straight up when checking the coolant level. A slight tilt to the side can result in an incorrect reading.

2. Check the coolant level in the coolant reservoir.

TIP

The coolant should be between the minimum and maximum level marks.



1. Coolant reservoir cap
2. Coolant reservoir
3. Maximum level mark
4. Minimum level mark

3. If the coolant is at or below the minimum level mark, remove panel A to access the coolant reservoir. (See page 9-8.)
4. Remove the coolant reservoir cap, add coolant to the maximum level mark, and then install the reservoir cap. **WARNING! Remove only the coolant reservoir cap. Never attempt to remove the radiator cap when the engine is hot.** [EWA15162] ***NOTICE:*** **If coolant is not available, use distilled water or soft tap water instead. Do not use hard water or salt water since it is harmful to the engine. If water has been used instead of coolant, replace it with coolant as soon as possible, otherwise the cooling system will not be protected against frost and corrosion. If water has been added to the coolant, have a Yamaha dealer check the antifreeze content of the coolant as soon as possible, otherwise the effectiveness of the coolant will be reduced.** [ECA10473]

Coolant reservoir capacity (up to the maximum level mark):
0.13 L (0.14 US qt, 0.11 Imp.qt)

5. Install the panel.

EAU33032

Changing the coolant

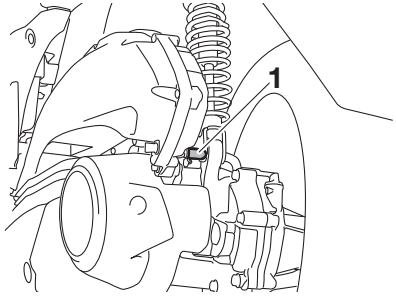
The coolant must be changed at the intervals specified in the periodic maintenance and lubrication chart. Have a Yamaha dealer change the coolant. **WARNING! Never attempt to remove the radiator cap when the engine is hot.** [EWA10382]

EAU67174

Air filter and V-belt case air filter elements

The air filter element should be replaced and the V-belt case air filter element should be cleaned at the intervals specified in the periodic maintenance and lubrication chart. Service the air filter elements more frequently if you are riding in unusually wet or dusty areas. The air filter check hose and V-belt case air filter check hose must be frequently checked and cleaned if necessary.

Cleaning the air filter check hose



1. Air filter check hose

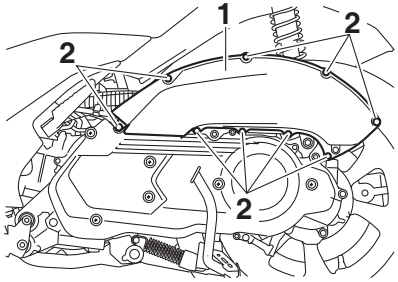
1. Check the hose on the rear side of the air filter case for accumulated dirt or water.
2. If dirt or water is visible, remove the hose from the clamp, clean it, and then install it.

TIP

If dirt or water was found in the check hose, be sure to check the air filter element for excessive dirt or damage and replace it if necessary.

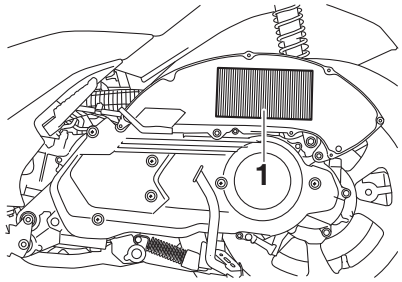
Replacing the air filter element

1. Place the vehicle on the centerstand.
2. Remove the air filter case cover by removing the screws.



1. Air filter case cover
2. Screw

3. Pull the air filter element out.



1. Air filter element

4. Insert a new air filter element into the air filter case. ***NOTICE:*** **Make sure that the air filter element is properly seated in the air filter case. The engine should never be operated without the air filter element installed, otherwise the piston(s) and/or cylinder(s) may become excessively worn.**

[ECA10482]

ECA21220

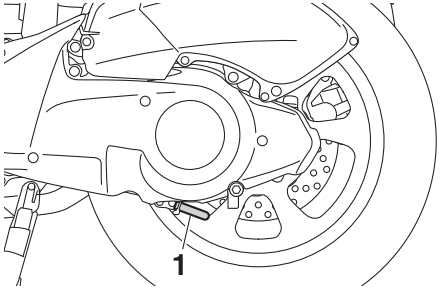
NOTICE

- **The air filter element must be replaced at the intervals specified in the periodic maintenance chart.**

- **The air filter element should be replaced more frequently if you often ride in the rain or dusty areas.**
- **The air filter cannot be cleaned by blowing it with compressed air. It must be replaced.**

5. Install the air filter case cover by installing the screws.

Cleaning the V-belt case check hose



1. V-belt case check hose

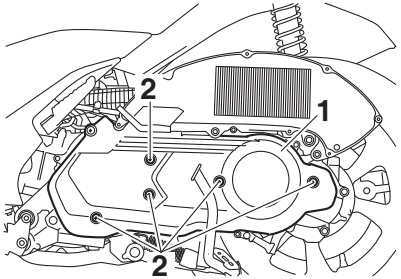
1. Check the hose on the rear side of the V-belt case for accumulated dirt or water.
2. If dirt or water is visible, remove the hose from the clamp, clean it, and then install it.

TIP

If dirt or water was found in the check hose, be sure to check the V-belt case air filter element for excessive dirt or damage and clean or replace it if necessary.

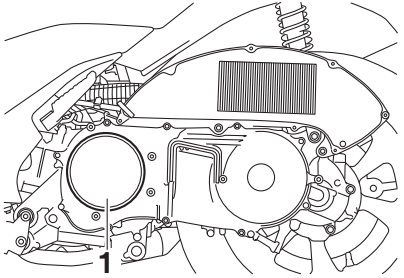
Cleaning the V-belt case air filter element

1. Place the vehicle on the centerstand.
2. Remove the screws, and then pull the V-belt case air filter element cover outward and away from the V-belt case.

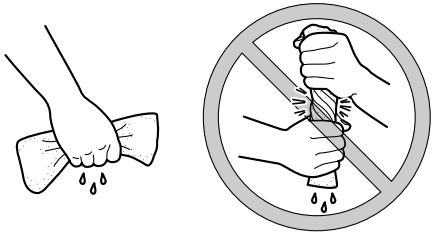


1. V-belt case air filter element cover
2. Screw

3. Pull the V-belt case air filter element out, and then clean it with solvent. After cleaning, remove the remaining solvent by squeezing the element. **WARNING! Use only a dedicated parts cleaning solvent. To avoid the risk of fire or explosion, do not use gasoline or solvents with a low flash point.** [EWA10432] ***NOTICE:*** **To avoid damaging the air filter element, handle it gently and carefully, and do not twist it.** [ECA10522]



1. V-belt case air filter element



4. Apply oil of the recommended type to the entire surface of the sponge material, and then squeeze the excess oil out.

TIP

- The air filter element should be wet but not dripping.
- Check the air filter element for excessive dirt or damage and replace it if necessary.

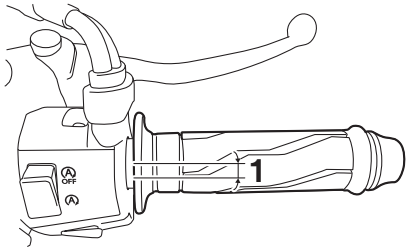
Recommended oil:
Yamaha foam air filter oil or other quality foam air filter oil

5. Insert the element into the V-belt case.
6. Install the air filter element cover by installing the screws.

EAU21386

Checking the throttle grip free play

Measure the throttle grip free play as shown.



1. Throttle grip free play

Throttle grip free play:
3.0–7.0 mm (0.12–0.28 in)

Periodically check the throttle grip free play and, if necessary, have a Yamaha dealer adjust it.

EAU21403

Valve clearance

The valves are an important engine component, and since valve clearance changes with use, they must be checked and adjusted at the intervals specified in the periodic maintenance chart. Unadjusted valves can result in improper air-fuel mixture, engine noise, and eventually engine damage. To prevent this from occurring, have your Yamaha dealer check and adjust the valve clearance at regular intervals.

TIP

This service must be performed when the engine is cold.

9

EAU69761

Tires

Tires are the only contact between the vehicle and the road. Safety in all conditions of riding depends on a relatively small area of road contact. Therefore, it is essential to maintain the tires in good condition at all times and replace them at the appropriate time with the specified tires.

Tire air pressure

The tire air pressure should be checked and, if necessary, adjusted before each ride.

EWA10504

⚠ WARNING

Operation of this vehicle with improper tire pressure may cause severe injury or death from loss of control.

- **The tire air pressure must be checked and adjusted on cold tires (i.e., when the temperature of the tires equals the ambient temperature).**
- **The tire air pressure must be adjusted in accordance with the riding speed and with the total weight of rider, passenger, cargo, and accessories approved for this model.**

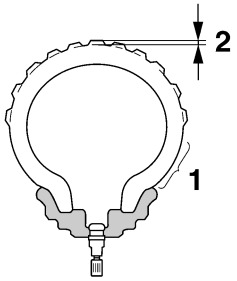
Cold tire air pressure:
1 person:
Front:
200 kPa (2.00 kgf/cm², 29 psi)
Rear:
225 kPa (2.25 kgf/cm², 33 psi)
2 persons:
Front:
200 kPa (2.00 kgf/cm², 29 psi)
Rear:
225 kPa (2.25 kgf/cm², 33 psi)
Maximum load:
Vehicle:
167 kg (368 lb)
The vehicle's maximum load is the combined weight of the rider, passenger, cargo, and any accessories.

EWA10512

⚠ WARNING

Never overload your vehicle. Operation of an overloaded vehicle could cause an accident.

Tire inspection



1. Tire sidewall
2. Tire tread depth

The tires must be checked before each ride. If the center tread depth reaches the specified limit, if the tire has a nail or glass fragments in it, or if the sidewall is cracked, have a Yamaha dealer replace the tire immediately.

Minimum tire tread depth (front and rear):
1.6 mm (0.06 in)

TIP

The tire tread depth limits may differ from country to country. Always comply with the local regulations.

EWA10472

⚠ WARNING

- **Have a Yamaha dealer replace excessively worn tires. Besides being illegal, operating the vehicle with excessively worn tires decreases riding stability and can lead to loss of control.**
- **The replacement of all wheel and brake-related parts, including the tires, should be left to a Yamaha dealer, who has the necessary professional knowledge and experience to do so.**
- **Ride at moderate speeds after changing a tire since the tire surface must first be "broken in" for it to develop its optimal characteristics.**

Tire information

This model is equipped with tubeless tires and rubber tire air valves.

Tires age, even if they have not been used or have only been used occasionally. Cracking of the tread and sidewall rubber, sometimes accompanied by carcass deformation, is an evidence of ageing. Old and aged tires shall be checked by tire specialists to ascertain their suitability for further use.

EWA10462

⚠ WARNING

The front and rear tires should be of the same make and design, otherwise the handling characteristics of the vehicle may be different, which could lead to an accident.

After extensive tests, only the tires listed below have been approved for this model by Yamaha.

Front tire:
Size:
90/80-14M/C 43P
Manufacturer/model:
IRC/SCT-003
Rear tire:
Size:
130/70-13M/C 63P
Manufacturer/model:
IRC/SCT-003

EAU61160

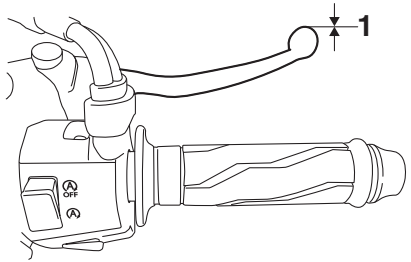
Cast wheels

To maximize the performance, durability, and safe operation of your vehicle, note the following points regarding the specified wheels.

- The wheel rims should be checked for cracks, bends, warpage or other damage before each ride. If any damage is found, have a Yamaha dealer replace the wheel. Do not attempt even the smallest repair to the wheel. A deformed or cracked wheel must be replaced.
- The front wheels should be balanced whenever either the tires or wheels have been changed or replaced. An unbalanced wheel can result in poor performance, adverse handling characteristics, and a shortened tire life.

EAU49351

Checking the front brake lever free play



1. No brake lever free play

There should be no free play at the brake lever end. If there is free play, have a Yamaha dealer inspect the brake system.

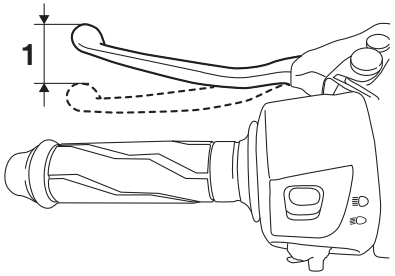
EWA14212

⚠ WARNING

A soft or spongy feeling in the brake lever can indicate the presence of air in the hydraulic system. If there is air in the hydraulic system, have a Yamaha dealer bleed the system before operating the vehicle. Air in the hydraulic system will diminish the braking performance, which may result in loss of control and an accident.

EAU60760

Checking the rear brake lever free play



1. Rear brake lever free play

Measure the rear brake lever free play as shown. Periodically check the brake lever free play and, if the free play is 20 mm (0.79 in) or more, have a Yamaha dealer check and adjust the brake system.

EWA10642

⚠ WARNING

An incorrect brake lever free play indicates a hazardous condition in the brake system. Do not operate the vehicle until the brake system has been checked or repaired by a Yamaha dealer.

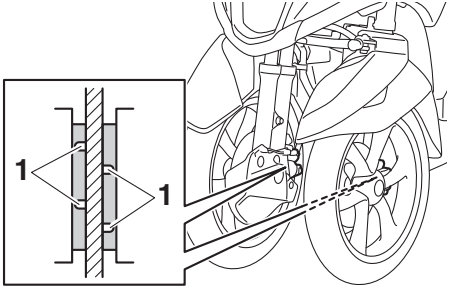
EAU22393

Checking the front and rear brake pads

The front and rear brake pads must be checked for wear at the intervals specified in the periodic maintenance and lubrication chart.

EAU22434

Front brake pads

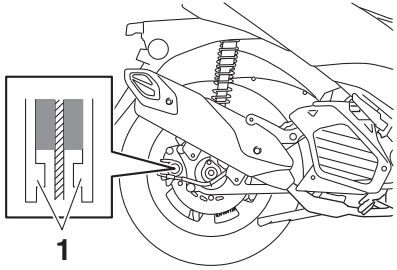


1. Brake pad wear indicator groove

Each front brake pad is provided with wear indicator grooves, which allow you to check the brake pad wear without having to disassemble the brake. To check the brake pad wear, check the wear indicator grooves. If a brake pad has worn to the point that the wear indicator grooves have almost disappeared, have a Yamaha dealer replace the brake pads as a set.

EAU22461

Rear brake pads



1. Brake pad wear indicator

Each rear brake pad is provided with a wear indicator, which allows you to check the brake pad wear without having to disassemble the brake. To check the brake pad wear, check the position of the wear indicator while applying the brake. If a brake pad has worn to the point that the wear indicator almost touches the brake disc, have a Yamaha dealer replace the brake pads as a set.

EAU22585

Checking the brake fluid level

Before riding, check that the brake fluid is above the minimum level mark.

TIP

Make sure the reservoir is level with the ground when checking the fluid level.

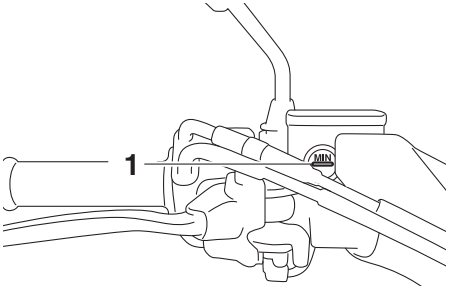
Specified brake fluid:
DOT 4

ECA17641

NOTICE

Brake fluid may damage painted surfaces or plastic parts. Always clean up spilled fluid immediately.

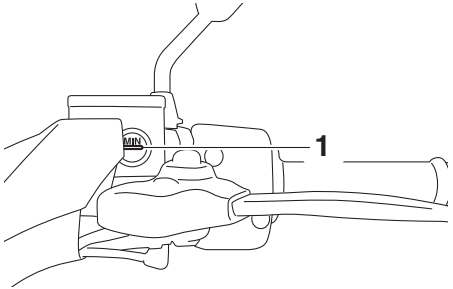
Front brake



1. Minimum level mark

9

Rear brake



1. Minimum level mark

As the brake pads wear, it is normal for the brake fluid level to gradually go down.

- A low brake fluid level may indicate worn brake pads or brake system leakage; therefore, be sure to check the brake pads for wear and the brake system for leakage.
- If the brake fluid level goes down suddenly, have a Yamaha dealer check the cause before further riding.

EWA15991

⚠ WARNING

Improper maintenance can result in loss of braking ability. Observe these precautions:

- **Insufficient brake fluid may allow air to enter the brake system, reducing braking performance.**
- **Clean the filler cap before removing. Use only DOT 4 brake fluid from a sealed container.**
- **Use only the specified brake fluid; otherwise, the rubber seals may deteriorate, causing leakage.**
- **Refill with the same type of brake fluid. Adding a brake fluid other than DOT 4 may result in a harmful chemical reaction.**
- **Be careful that water does not enter the brake fluid reservoir when refilling. Water will significantly lower the boiling point of the fluid and may result in vapor lock.**

EAU22734

Changing the brake fluid

Have a Yamaha dealer change the brake fluid every 2 years. In addition, have the seals of the master cylinders and brake calipers, as well as the brake hoses replaced at the intervals listed below or sooner if they are damaged or leaking.

- Brake seals: every 2 years
- Brake hoses: every 4 years

EAUU0311

Checking the V-belt

The V-belt must be checked and replaced by a Yamaha dealer at the intervals specified in the periodic maintenance and lubrication chart.

EAU23098

Checking and lubricating the cables

The operation of all control cables and the condition of the cables should be checked before each ride, and the cables and cable ends should be lubricated if necessary. If a cable is damaged or does not move smoothly, have a Yamaha dealer check or replace it. **WARNING! Damage to the outer housing of cables may result in internal rusting and cause interference with cable movement. Replace damaged cables as soon as possible to prevent unsafe conditions.** [EWA10712]

Recommended lubricant:
Yamaha cable lubricant or other suitable cable lubricant

EAU49921

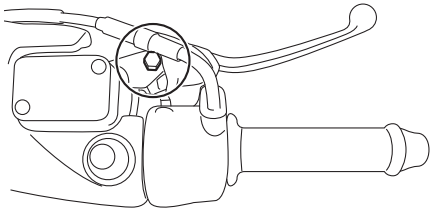
Checking and lubricating the throttle grip and cable

The operation of the throttle grip should be checked before each ride. In addition, the cable should be lubricated by a Yamaha dealer at the intervals specified in the periodic maintenance chart.

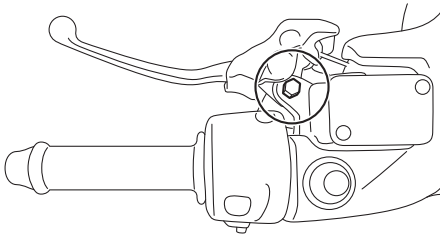
EAU23173

Lubricating the front and rear brake levers

Front brake lever



Rear brake lever

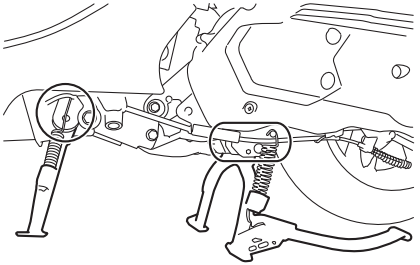


The pivoting points of the front and rear brake levers must be lubricated at the intervals specified in the periodic maintenance and lubrication chart.

Recommended lubricant:
Silicone grease

EAU23215

Checking and lubricating the centerstand and sidestand



The operation of the centerstand and sidestand should be checked before each ride, and the pivots and metal-to-metal contact surfaces should be lubricated if necessary.

EWA10742

⚠ WARNING

If the centerstand or sidestand does not move up and down smoothly, have a Yamaha dealer check or repair it. Otherwise, the centerstand or sidestand could contact the ground and distract the operator, resulting in a possible loss of control.

Recommended lubricant:
Lithium-soap-based grease

EAU23273

Checking the front fork

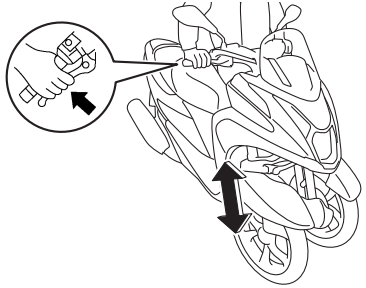
The condition and operation of the front fork must be checked as follows at the intervals specified in the periodic maintenance and lubrication chart.

To check the condition

Check the inner tubes for scratches, damage and excessive oil leakage.

To check the operation

1. Place the vehicle on a level surface and hold it in an upright position. **WARNING! To avoid injury, securely support the vehicle so there is no danger of it falling over.** [EWA10752]
2. While applying the front brake, push down hard on the handlebars several times to check if the front fork compresses and rebounds smoothly.



ECA10591

NOTICE

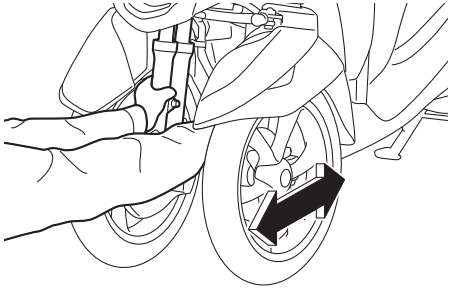
If any damage is found or the front fork does not operate smoothly, have a Yamaha dealer check or repair it.

EAU45512

Checking the steering

Worn or loose steering bearings may cause danger. Therefore, the operation of the steering must be checked as follows at the intervals specified in the periodic maintenance and lubrication chart.

1. Place the vehicle on the centerstand. **WARNING! To avoid injury, securely support the vehicle so there is no danger of it falling over.** [EWA10752]
2. Hold the lower ends of the front fork legs and try to move them forward and backward. If any free play can be felt, have a Yamaha dealer check or repair the steering.



EAU89070

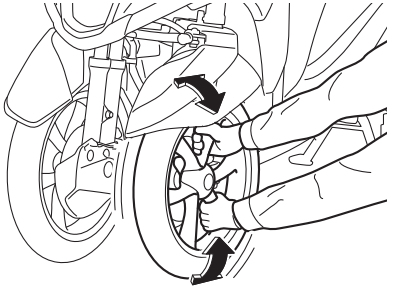
Lubricating the steering bearings

The steering bearings must be lubricated by a Yamaha dealer at the intervals specified in the periodic maintenance chart.

Recommended lubricant:
Lithium-soap-based grease

EAU84970

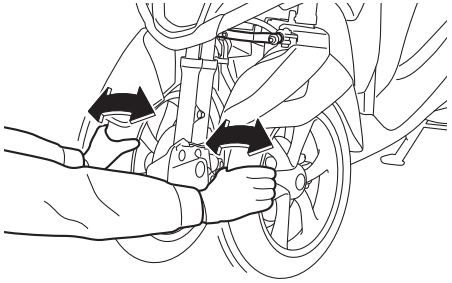
Checking the wheel bearings



The front and rear wheel bearings must be checked by a Yamaha dealer at the intervals specified in the periodic maintenance chart.

EAU61420

Checking the steering tie rod



The steering tie rod must be checked at the intervals specified in the periodic maintenance and lubrication chart. If there is play in the steering tie rod, have a Yamaha dealer check the tie rod.

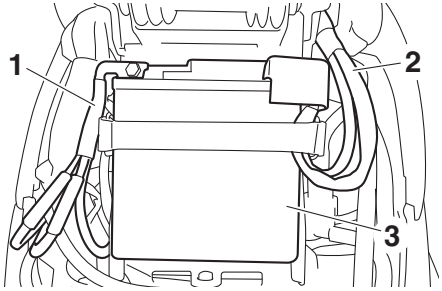
EAU61390

Checking the leaning system

The leaning system must be checked by a Yamaha dealer at the intervals specified in the periodic maintenance and lubrication chart.

EAU60691

Battery



1. Negative battery lead (black)
2. Positive battery lead (red)
3. Battery

The battery is located behind panel A. (See page 9-8.)
This model is equipped with a VRLA (Valve Regulated Lead Acid) battery. There is no need to check the electrolyte or to add distilled water. However, the battery lead connections need to be checked and, if necessary, tightened.

EWA10761

⚠ WARNING

- **Electrolyte is poisonous and dangerous since it contains sulfuric acid, which causes severe**

9

burns. Avoid any contact with skin, eyes or clothing and always shield your eyes when working near batteries. In case of contact, administer the following FIRST AID.
- **EXTERNAL: Flush with plenty of water.**
- **INTERNAL: Drink large quantities of water or milk and immediately call a physician.**
- **EYES: Flush with water for 15 minutes and seek prompt medical attention.**

- **Batteries produce explosive hydrogen gas. Therefore, keep sparks, flames, cigarettes, etc., away from the battery and provide sufficient ventilation when charging it in an enclosed space.**
- **KEEP THIS AND ALL BATTERIES OUT OF THE REACH OF CHILDREN.**

To charge the battery

Have a Yamaha dealer charge the battery as soon as possible if it seems to have discharged. Keep in mind that the battery tends to discharge more quickly if the vehicle is equipped with optional electrical accessories.

ECA16522

NOTICE

To charge a VRLA (Valve Regulated Lead Acid) battery, a special (constant-voltage) battery charger is required. Using a conventional battery charger will damage the battery.

To store the battery

1. If the vehicle will not be used for more than one month, remove the battery, fully charge it, and then place it in a cool, dry place. ***NOTICE:*** **When removing the battery, be sure to turn the main switch off, then disconnect the negative lead before disconnecting the positive lead.** [ECA16304]
2. If the battery will be stored for more than two months, check it at least once a month and fully charge it if necessary.
3. Fully charge the battery before installation. ***NOTICE:*** **When installing the battery, be sure to turn the main switch off, then connect the positive lead before connecting the negative lead.** [ECA16842]
4. After installation, make sure that the battery leads are properly connected to the battery terminals.

ECA16531

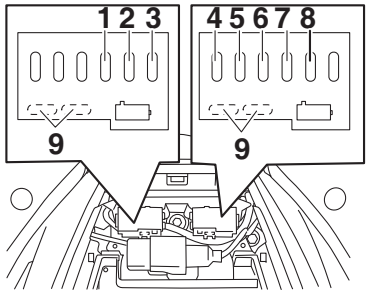
NOTICE

Always keep the battery charged. Storing a discharged battery can cause permanent battery damage.

EAUU2320

Replacing the fuses

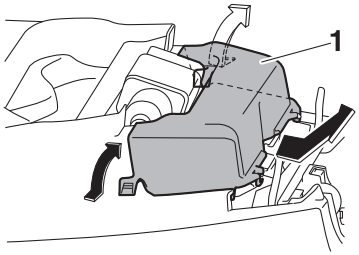
The fuse boxes, which contain the fuse for the individual circuits, are located under the seat. (See page 6-13.)



1. Smart key system fuse
2. Terminal fuse
3. Signaling system fuse
4. Fuel injection system fuse
5. Backup fuse
6. Main fuse
7. Ignition fuse
8. Headlight fuse
9. Spare fuse

If a fuse is blown, replace it as follows.

1. Turn the key to “OFF” and turn off the electrical circuit in question.
2. Open the seat. (See page 6-13.)
3. Remove the fuse box cover as shown.



1. Fuse box cover

4. Remove the blown fuse, and then install a new fuse of the specified amperage. **WARNING! Do not use a fuse of a higher amperage rating than recommended to avoid causing extensive damage to the electrical system and possibly a fire.** [EWA15132]

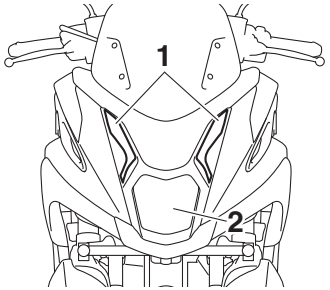
Specified fuses:
- Main fuse: 30.0 A
- Terminal fuse 1: 5.0 A
- Headlight fuse: 7.5 A
- Signaling system fuse: 7.5 A
- Ignition fuse: 7.5 A
- Smart key system fuse: 2.0 A
- Fuel injection system fuse: 7.5 A
- Backup fuse: 7.5 A

5. Turn the key to “ON” and turn on the electrical circuit in question to check if the device operates.
6. If the fuse immediately blows again, have a Yamaha dealer check the electrical system.
7. Install the fuse box cover, and then close the seat.

EAUN2261

Vehicle lights

This model is equipped with LED lights for headlights, auxiliary lights and brake/tail light. If a light does not come on, check the fuse and then have a Yamaha dealer check the vehicle.



1. Headlight
2. Auxiliary light

ECA16581

NOTICE

Do not affix any type of tinted film or stickers to the headlight lens.

EAU61170

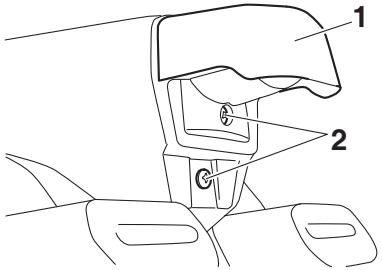
Turn signal light bulb

If a turn signal light does not come on, have a Yamaha dealer check its electrical circuit or replace the bulb.

EAU89380

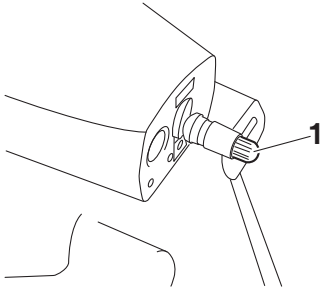
Replacing the license plate light bulb

1. Remove the license plate light cover by removing the screws.



1. License plate light unit
2. Screw

2. Remove the license plate light bulb socket (together with the bulb) by pulling it out.



1. License plate light bulb socket

3. Remove the burnt-out bulb by pulling it out from the socket.
4. Insert a new bulb into the socket.
5. Install the socket (together with the bulb) by pushing it in.
6. Install the license plate light cover by installing the screws.

EAU60701

Troubleshooting

Although Yamaha vehicles receive a thorough inspection before shipment from the factory, trouble may occur during operation. Any problem in the fuel, compression, or ignition systems, for example, can cause poor starting and loss of power.

The following troubleshooting charts represent quick and easy procedures for checking these vital systems yourself. However, should your vehicle require any repair, take it to a Yamaha dealer, whose skilled technicians have the necessary tools, experience, and know-how to service the vehicle properly.

Use only genuine Yamaha replacement parts. Imitation parts may look like Yamaha parts, but they are often inferior, have a shorter service life and can lead to expensive repair bills.

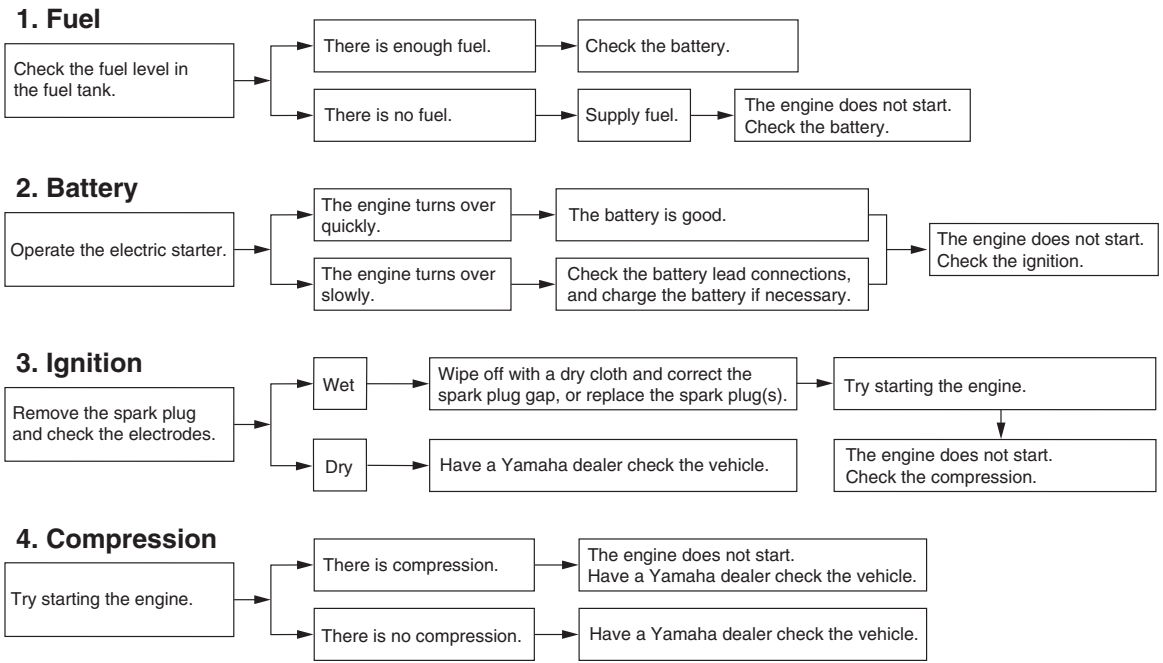
EWA15142

⚠ WARNING

When checking the fuel system, do not smoke, and make sure there are no open flames or sparks in the area, including pilot lights from water heaters or furnaces. Gasoline or gasoline vapors can ignite or explode, causing severe injury or property damage.

EAU86350

Troubleshooting chart



9

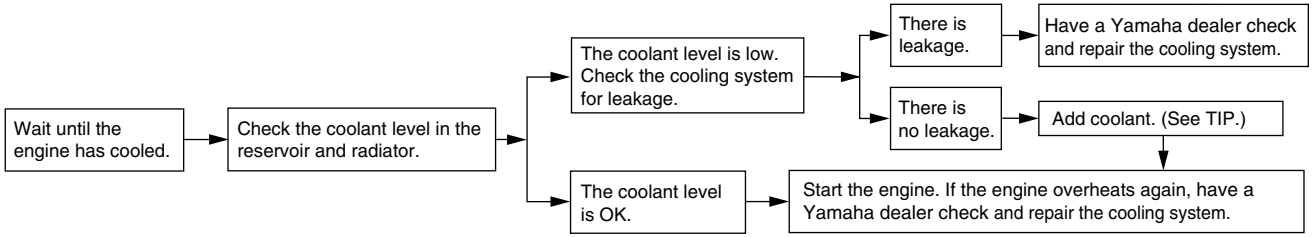
EAU86420

Engine overheating

EWAT1041

WARNING

- **Do not remove the radiator cap when the engine and radiator are hot. Scalding hot fluid and steam may be blown out under pressure, which could cause serious injury. Be sure to wait until the engine has cooled.**
- **Place a thick rag, like a towel, over the radiator cap, and then slowly rotate the cap counterclockwise to the detent to allow any residual pressure to escape. When the hissing sound has stopped, press down on the cap while turning it counterclockwise, and then remove the cap.**



TIP

If coolant is not available, tap water can be temporarily used instead, provided that it is changed to the recommended coolant as soon as possible.

EAU76564

Emergency mode

When the smart key is lost or damaged, or its battery has discharged, the vehicle can still be turned on and the engine started. You will need the smart key system identification number.

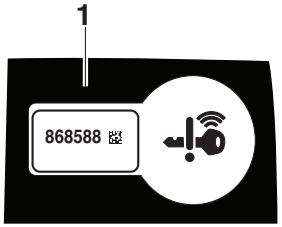
To operate the vehicle in emergency mode

1. Stop the vehicle in a safe place and confirm the main switch is set to either "🔒" or "OFF".
2. Push the main switch knob for 5 seconds until the smart key system indicator light flashes once, then release it. Repeat two more times. The smart key system indicator light will come on for three seconds to indicate the transition to emergency mode.



1. Smart key system indicator light "🔑"

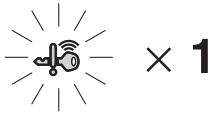
3. After the smart key system indicator light goes off, input the identification number as follows.



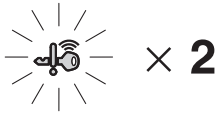
1. Identification number

4. Inputting the identification number is done by counting the number of flashes of the smart key system indicator light.

For example, if the identification number is 123456:
Push and hold the knob.
↓
The smart key system indicator light will start to flash.
↓



Release the knob after the smart key system indicator light flashes once.
↓
The first digit of the identification number has been set as "1".
↓
Push and hold the knob again.
↓



Release the knob after the smart key system indicator light flashes twice.
↓
The second digit has been set as "2".
↓
Repeat the above procedure until all digits of the identification number have been set. The smart key system indicator light will flash for 10 seconds if the correct identification number was entered.

TIP

When one of the following situations applies, emergency mode will be terminated and the smart key system indicator light will flash quickly for 3 seconds. In this case, start over again from step 2.

- When there are no knob operations for 10 seconds during the identification number input process.
- When the smart key system indicator light is allowed to flash nine or more times.
- The identification number is not entered correctly.

5. While the smart key system indicator light is on, push the knob once more to complete emergency mode access. The smart key indicator light will go off and then come back on for approximately 4 seconds.
6. While the smart key system indicator light is on, turn the main switch to "ON". The vehicle can now be operated normally.

EAU37834

Matte color caution

ECA15193

NOTICE

Some models are equipped with matte colored finished parts. Be sure to consult a Yamaha dealer for advice on what products to use before cleaning the vehicle. Using a brush, harsh chemical products or cleaning compounds when cleaning these parts will scratch or damage their surface. Wax also should not be applied to any matte colored finished parts.

EAUU1741

Care

While the open design of this vehicle reveals the attractiveness of the technology, it also makes it more vulnerable. Rust and corrosion can develop even if high-quality components are used. A rusty exhaust pipe may go unnoticed on a car, however, it detracts from the overall appearance of this vehicle. Frequent and proper care does not only comply with the terms of the warranty, but it will also keep your vehicle looking good, extend its life and optimize its performance.

Special care in winter

ECA28181

NOTICE

In cold weather, when roads may be salted as a de-icing method, it's important to clean the vehicle thoroughly to remove road salt and avoid corrosion. Wheel spokes, bolts/nuts and other unpainted metal parts can be especially vulnerable to corrosion from road salt. Apply an anti-corrosion product to any vulnerable parts after washing and drying the vehicle.

TIP

- The roads of heavy snowfall areas may be sprayed with salt as a de-icing method. This salt can stay on the roads well into spring, so be sure to wash the underside and chassis parts after riding in such areas.
- Genuine Yamaha care and maintenance products are sold under the YAMALUBE brand in many markets worldwide.
- See your Yamaha dealer for additional cleaning tips.

Before cleaning

1. Cover the muffler outlet with a plastic bag after the engine has cooled down.
2. Make sure that all caps and covers as well as all electrical couplers and connectors, including the spark plug cap, are tightly installed.

3. Remove extremely stubborn dirt, like oil burnt onto the crankcase, with a degreasing agent and a brush, but never apply such products onto seals, gaskets and wheel axles. Always rinse the dirt and degreaser off with water.

Cleaning

ECA20970

NOTICE

- **Avoid using strong acidic wheel cleaners, especially on spoke wheels. If such products are used on hard-to-remove dirt, do not leave the cleaner on the affected area any longer than instructed. Also, thoroughly rinse the area off with water, immediately dry it, and then apply a corrosion protection spray.**
- **Improper cleaning can damage plastic parts (such as cowlings, panels, windshields, headlight lenses, meter lenses, etc.) and the mufflers. Use only a soft, clean cloth or sponge with water to clean plastic. However, if the plastic parts cannot be thoroughly cleaned with water, diluted mild detergent with water may be used. Be sure to rinse off any detergent residue using plenty of water, as it is harmful to plastic parts.**
- **Do not use any harsh chemical products on plastic parts. Be sure to avoid using cloths or sponges which have been in contact with strong or abrasive cleaning products, solvent or thinner, fuel (gasoline), rust removers or inhibitors, brake fluid, antifreeze or electrolyte.**
- **Do not use high-pressure washers or steam-jet cleaners since they cause water seepage and deterioration in the following areas: seals (of wheel and swingarm bearings, fork and brakes), electric components (couplers, connectors, instruments, switches and lights), breather hoses and vents.**
- **For vehicles equipped with a windshield: Do not use strong cleaners or hard sponges as they will cause dulling or scratching. Some cleaning compounds for plastic may leave scratches on the windshield. Test the product on a small hidden part of the windshield to make sure that it does not leave any marks. If the windshield is scratched, use a quality plastic polishing compound after washing.**

ECAU0061

NOTICE

Use care when cleaning the radiator. High-pressure washers may damage the radiator fins. Do not spray the radiator fins at an angle, and always keep the nozzle at least 50 cm (20 in) away from the spins when spraying.

10

After normal use

Remove dirt with warm water, a mild detergent, and a soft, clean sponge, and then rinse thoroughly with clean water. Use a toothbrush or bottlebrush for hard-to-reach areas. Stubborn dirt

and insects will come off more easily if the area is covered with a wet cloth for a few minutes before cleaning.

After riding in the rain, near the sea, or on salt-sprayed roads

Since sea salt or salt sprayed on roads during winter are extremely corrosive in combination with water, carry out the following steps after each ride in the rain, near the sea, or on salt-sprayed roads.

TIP

Salt sprayed on roads in the winter may remain well into spring.

1. Clean the vehicle with cold water and a mild detergent after the engine has cooled down. ***NOTICE:*** **Do not use warm water since it increases the corrosive action of the salt.** [ECA10792]
2. Apply a corrosion protection spray on all metal, including chrome- and nickel-plated, surfaces to prevent corrosion.

Cleaning the windshield

Avoid using any alkaline or strong acid cleaner, gasoline, brake fluid, or any other solvent. Clean the windshield with a cloth or sponge dampened with a mild detergent, and then wash it off thoroughly with water. For additional cleaning, use Yamaha Windshield Cleaner or another high-quality windshield cleaner. Some cleaning compounds for plastics may leave scratches on the windshield. Before using such cleaners, test an area of the windshield which does not affect your visibility and which cannot be easily recognized.

After cleaning

1. Dry the vehicle with a chamois or an absorbing cloth.
2. Use a chrome polish to shine chrome, aluminum, and stainless-steel parts, including the exhaust system. (Even the thermally induced discoloring of stainless-steel exhaust systems can be removed through polishing.)
3. To prevent corrosion, it is recommended to apply a corrosion protection spray on all metal, including chrome- and nickel-plated surfaces.
4. Use spray oil as a universal cleaner to remove any remaining dirt.
5. Touch up minor paint damage caused by stones, etc.
6. Wax all painted surfaces.
7. Let the vehicle dry completely before storing or covering it.

EWA17830

⚠ WARNING

Contaminants on the brakes or tires can cause loss of control.

- **Make sure that there is no oil or wax on the brakes or tires. If necessary, clean the brake discs and brake linings with a regular brake disc cleaner or acetone, and wash the tires with warm water and a mild detergent.**
- **Before operating the vehicle test its braking performance and cornering behavior.**

ECAU0022

NOTICE

- **Apply spray oil and wax sparingly and make sure to wipe off any excess.**
- **Never apply oil or wax to any rubber parts, plastic parts or headlight, taillight and meter lenses, but treat them with a suitable care product.**
- **Avoid using abrasive polishing compounds as they will wear away the paint.**

TIP

- Consult a Yamaha dealer for advice on what products to use.
- Washing, rainy weather or humid climates can cause the headlight lens to fog. Turning the headlight on for a short period of time will help remove the moisture from the lens.

EAU83472

Storage

Always store the vehicle in a cool, dry place. If necessary, protect it against dust with a porous cover. Be sure the engine and the exhaust system are cool before covering the vehicle. If the vehicle often sits for weeks at a time between uses, the use of a quality fuel stabilizer is recommended after each fill-up.

ECA21170

NOTICE

- **Storing the vehicle in a poorly ventilated room or covering it with a tarp, while it is still wet, will allow water and humidity to seep in and cause rust.**
- **To prevent corrosion, avoid damp cellars, stables (because of the presence of ammonia) and areas where strong chemicals are stored.**

Long term storage

Before storing the vehicle long term (60 days or more):

1. Make all necessary repairs and perform any outstanding maintenance.
2. Follow all instructions in the Care section of this chapter.
3. Fill up the fuel tank, adding fuel stabilizer according to product instructions. Run the engine for 5 minutes to distribute treated fuel through the fuel system.
4. For vehicles equipped with a fuel cock: Turn the fuel cock lever to the off position.
5. For vehicles with a carburetor: To prevent fuel deposits from building up, drain the fuel in the carburetor float chamber into a clean container. Retighten the drain bolt and pour the fuel back into the fuel tank.
6. Use a quality engine fogging oil according to product instructions to protect internal engine components from corrosion. If engine fogging oil is not available, perform the following steps for each cylinder:
   a. Remove the spark plug cap and spark plug.

b. Pour a teaspoonful of engine oil into the spark plug bore.
c. Install the spark plug cap onto the spark plug, and then place the spark plug on the cylinder head so that the electrodes are grounded. (This will limit sparking during the next step.)
d. Turn the engine over several times with the starter. (This will coat the cylinder wall with oil.) **WARNING! To prevent damage or injury from sparking, make sure to ground the spark plug electrodes while turning the engine over.** [EWA10952]
e. Remove the spark plug cap from the spark plug, and then install the spark plug and the spark plug cap.

7. Lubricate all control cables, pivots, levers and pedals, as well as the sidestand and centerstand (if equipped).
8. Check and correct the tire air pressure, and then lift the vehicle so that all wheels are off the ground. Otherwise, turn the wheels a little once a month in order to prevent the tires from becoming degraded in one spot.
9. Cover the muffler outlet with a plastic bag to prevent moisture from entering it.
10. Remove the battery and fully charge it, or attach a maintenance charger to keep the battery optimally charged. ***NOTICE:*** **Confirm that the battery and its charger are compatible. Do not charge a VRLA battery with a conventional charger.** [ECA26330]

TIP

- If the battery will be removed, charge it once a month and store it in a temperate location between 0-30 °C (32-90 °F).
- See page 9-25 for more information on charging and storing the battery.

Dimensions:
Overall length:
1995 mm (78.5 in)
Overall width:
750 mm (29.5 in)
Overall height:
1215 mm (47.8 in)
Seat height:
785 mm (30.9 in)
Wheelbase:
1410 mm (55.5 in)
Ground clearance:
125 mm (4.92 in)
Minimum turning radius:
2.6 m (8.53 ft)

Weight:
Curb weight:
168 kg (370 lb)

Engine:
Combustion cycle:
4-stroke
Cooling system:
Liquid cooled
Valve train:
SOHC
Number of cylinders:
Single cylinder
Displacement:
125 cm^3
Bore × stroke:
52.0 × 58.7 mm (2.05 × 2.31 in)

Engine oil:
Recommended brand:
YAMALUBE®
SAE viscosity grades:
10W-40
Recommended engine oil grade:
API service SG type or higher, JASO standard MA or MB
Engine oil quantity:
Oil change:
0.90 L (0.95 US qt, 0.79 Imp.qt)

Final transmission oil:
Type:
Motor oil SAE 10W-40 type SG or higher
Quantity:
0.10 L (0.11 US qt, 0.09 Imp.qt)

Coolant quantity:
Coolant reservoir (up to the maximum level mark):
0.13 L (0.14 US qt, 0.11 Imp.qt)
Radiator (including all routes):
0.46 L (0.49 US qt, 0.40 Imp.qt)

Fuel:
Recommended fuel:
Unleaded gasoline (E10 acceptable)
Octane number (RON):
90
Fuel tank capacity:
7.2 L (1.9 US gal, 1.6 Imp.gal)
Fuel reserve amount:
1.6 L (0.42 US gal, 0.35 Imp.gal)

Fuel injection:
Throttle body:
ID mark:
B2T1

Chassis:
Track:
385 mm (15.2 in)

Front tire:
Type:
Tubeless
Size:
90/80-14M/C 43P
Manufacturer/model:
IRC/SCT-003

Rear tire:
Type:
Tubeless
Size:
130/70-13M/C 63P
Manufacturer/model:
IRC/SCT-003

Loading:
Maximum load:
167 kg (368 lb)
(Total weight of rider, passenger, cargo and accessories)

Unified brake system:
Operation:
Activated by rear brake

Front brake:
Type:
Hydraulic disc brake

Specifications

Rear brake:
Type:
Hydraulic single disc brake
Front suspension:
Type:
Telescopic fork
Rear suspension:
Type:
Unit swing
Electrical system:
System voltage:
12 V
Battery:
Model:
YTZ7V
Voltage, capacity:
12 V, 6.0 Ah (10 HR)
Bulb wattage:
Headlight:
LED
Brake/tail light:
LED
Front turn signal light:
10.0 W
Rear turn signal light:
10.0 W
Auxiliary light:
LED
License plate light:
5.0 W

EAU53562

Identification numbers

Record the vehicle identification number, engine serial number, and the model label information in the spaces provided below. These identification numbers are needed when registering the vehicle with the authorities in your area and when ordering spare parts from a Yamaha dealer.

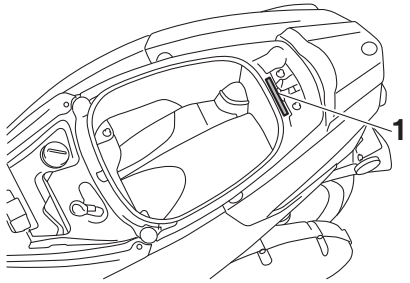
VEHICLE IDENTIFICATION NUMBER:

ENGINE SERIAL NUMBER:

MODEL LABEL INFORMATION:

EAU26411

Vehicle identification number



1. Vehicle identification number

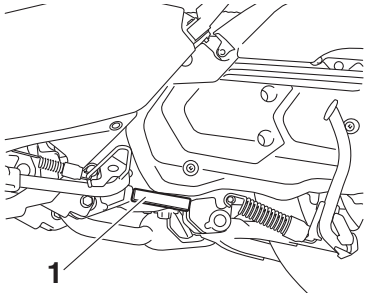
The vehicle identification number is stamped into the frame.

TIP

The vehicle identification number is used to identify your vehicle and may be used to register it with the licensing authority in your area.

EAUU1221

Engine serial number

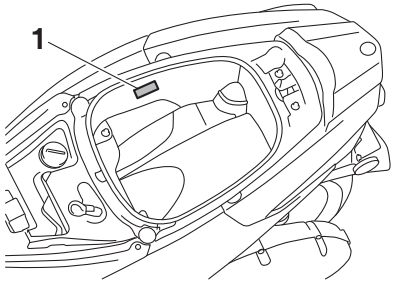


1. Engine serial number

The engine serial number is stamped on the bottom left side of the crankcase.

EAUT1441

Model label

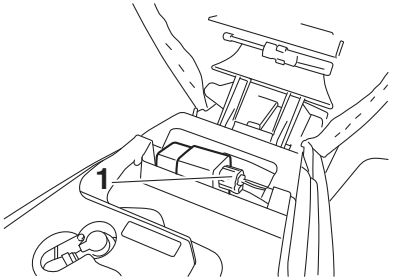


1. Model label

The model label is affixed to the inside of the storage compartment. (See page 6-14.) Record the information on this label in the space provided. This information will be needed when ordering spare parts from a Yamaha dealer.

EAU69910

Diagnostic connector



1. Diagnostic connector

The diagnostic connector is located as shown.

EAU85300

Vehicle data recording

This model's ECU stores certain vehicle data to assist in the diagnosis of malfunctions and for research, statistical analysis and development purposes.

Although the sensors and recorded data will vary by model, the main data points are:

- Vehicle status and engine performance data
- Fuel-injection and emission-related data

This data will be uploaded only when a special Yamaha diagnostic tool is attached to the vehicle, such as when maintenance checks or service procedures are performed.

Vehicle data uploaded will be handled appropriately according to the following Privacy Policy.

Privacy Policy

https://www.yamaha-motor.eu/eu/en/privacy/privacy-policy/

Yamaha will not disclose this data to a third party except in the following cases. In addition, Yamaha may provide vehicle data to a contractor in order to outsource services related to the handling of vehicle data. Even in this case, Yamaha will require the contractor to properly handle the vehicle data we provided and Yamaha will appropriately manage the data.

- With the consent of the vehicle owner
- Where obligated by law
- For use by Yamaha in litigation
- When the data is not related to an individual vehicle nor owner

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Original instructions



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